Sveriges lantbruksuniversitet
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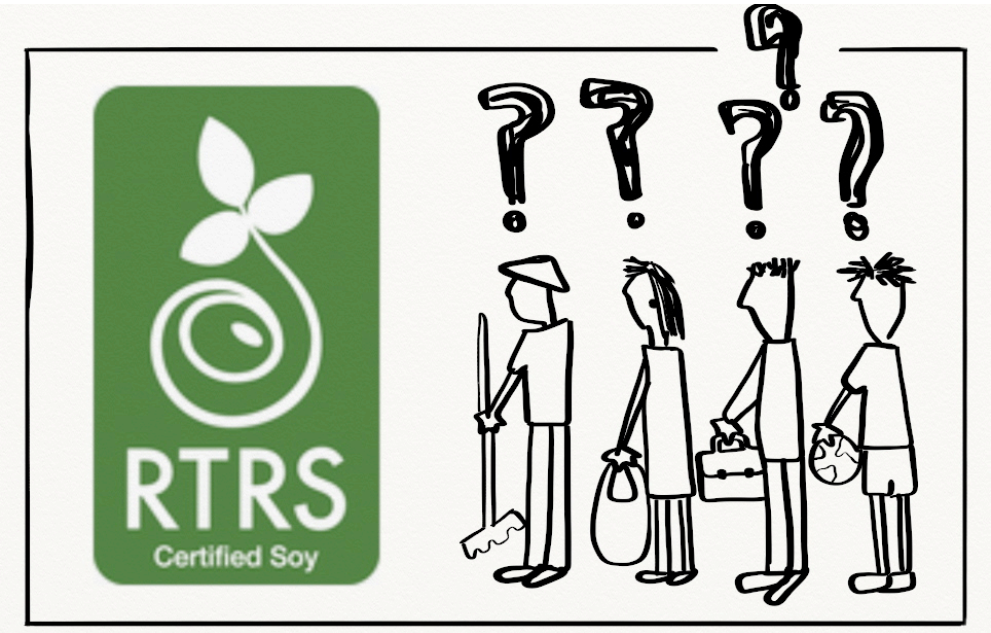
Department of Economics

Drivers for Sustainability B2B Private Standards

- The Case of the RoundTable on Responsible Soy Standard

Carmen Álvarez Campo



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Carmen Álvarez Campo

Abstract

Sustainability Business-to-Business Private Standards have, in general, received many critiques. However, since they were born around 20 years ago, their popularity and application continue growing. Many are the companies that require its suppliers to comply with a particular scheme, despite any negative judgements and the doubts about its effectiveness. One example is the case of the RoundTable on Responsible Soy (RTRS) standard for demanded by the Swedish Lantmännen cooperative to its suppliers. Despite the extended list of critiques towards this scheme, the Lantmännen group's objective is that all the consumed soy, which they import solely from Brazil, posses the RTRS certificate at the end of the current year 2015.

The aim of this study is to identify the drivers that make a company applying one of these standards. For reaching this aim, a qualitative case study is carried. The objective is to identify the reasons why Lantmännen requires such a standard to suppliers. Taking Stakeholder theory as point of department, a conceptual framework with potential internal and external drivers is created. The main source of information is telephone interviews with a member of the Sustainable Development department in Lantmännen. In addition, analysis of official documents, news and reports is conducted.

The main findings are that Lantmännen's main driver for RTRS standard acquisition is not sustainability awareness and that many others drivers, both internal and external, are actually influencing the decision. These drivers are: board of directors' personal norms, reputational risk management, maintenance of market share, NGO pressure through engagement, pre-emption of regulation and reduction in tort liability.

Abbreviations

- ASEED- Action for Solidarity Environment Equality and Diversity
- B2B- Business to Business
- B2C- Business to Consumers
- BCRSP- Basel Criteria for Responsible Soy Production
- BSI- British Standards Institution
- EMI- Environmental Management Information
- ES- Environmental Standard
- GM- Genetically Modified
- GMO- Genetically Modified Organism
- GSC- Global Supply Chain
- GVC- Global Value Chain
- IFAMR- International Food and Agribusiness Management Review
- ISO- International Standard Organization
- KKM- Keten Kwaliteit Melk
- NGO- Non Governmental Organization
- PS- Private Standard
- RR- Roundup Ready
- RSPO- Roundtable on Sustainable Palm Oil
- RTRS- RoundTable on Responsible Soy
- SB2BPS- Sustainability Business to Business Private Standards
- SC- Supply Chain
- SCM- Supply Chain Management
- SCoC- Supplier Code of Conduct
- SS- Sustainable Standard
- TBL- Triple Bottom Line
- WTO- World Trade Organization
- WWF- World Wildlife Fund

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1 Introduction

During the last 20 years, sustainable development has emerged as a state of the world. It has resulted in environmentally and social concerned business and consumers that require companies to take responsibility over their actions (Sarkis, 2003; Carter & Rogers, 2008; Belz & Peattie, 2009). Now, sustainability is important to the point that it is considered as the only way to succeed in the interdependent world in which we live (Savitz, 2013).

Savitz (2013, 2) defines a sustainable corporation as the one that *"creates profit for its shareholders while protecting the environment and improving the lives of those with whom it interacts"*. Thus, business interest intersects with environmental and social interests. This idea was initially presented by John Elkington in 1994 under the term 'Triple Bottom Line' (TBL). Likewise, Slaper and Hall (2011, 4) stated, *"TBL reporting is an important tool to support sustainability goals"*. So, the TBL captures the essence of sustainability by measuring the impact of the firm. And it can be said that implementing sustainability requires a TBL approach.

Over the past ten years research and debate about TBL application in the Supply Chain (SC) has increased. Sustainable Supply Chain Management (SCM) has received a lot of attention (Carter & Rogers, 2008; Govindan *et al.,* 2013). Now, it is considered that responsibility about social, environmental and economic aspects goes beyond the company itself. Firms are supposed to respond for all the participants of the SC (Neef, 2004; Pedersen & Andersen, 2006).

Regarding responsible practices, the most relevant internal stakeholder for a company to succeed, is the group of suppliers (Zsidisin & Siferd, 2001; Neef, 2004; Hamner, 2006). This means that Business-to-Business (B2B) relationships are notably important. Because of this reason, involving suppliers in planning and goal setting of environmental and social management is needed (Lai *et al*., 2014). There are several favourable practices in purchasing regarding sustainability but two of them have received significant attention. Standardization/certification and collaboration are the most popular among literature (Hamner, 2006; Vogel, 2008; Pagell & Wu, 2009) and both are closely related and interlinked.

Sustainability Standards (SSs), and their correspondent certificates were created in the 90s (Neef, 2004). Non-governmental Organizations (NGOs), investors and consumers asking for accountability and transparency to multinationals' activities lead to their appearance (*ibid.*). From that moment, establishing, monitoring and verifying standards have been gaining importance in SCM (Giovannucci & Ponte, 2005; Corbett & Klassen 2006; Pedersen & Andersen, 2006; Vogel, 2008). And today, regardless of the industry, any company is probably pushed to comply with a code offered by 3rd parties (Neef, 2004). Concurrently, collaboration with SC partners is even considered mandatory when pursuing a responsible SCM (Lai *et al*., 2014). On top of that, collaboration positively affects the implementation of standards. Waldman & Kerr (2014) found that further development and participation in multi-stakeholder groups designed to meet the criteria outlined in the standard would likely be components of any effective implementation.

1.1 Problem background

The development of these standards is generally not easy. The different participants differ in procedures and measures for creating environmental and social norms (Neef, 2004). Moreover, international trade has risen dramatically lately and in Global Supply Chains (GSCs) it is even more difficult to enforce standards (Giovannucci & Ponte, 2005). Pedersen & Andersen (2006) assure that, for instance, the distance in terms of space, culture or language, obstruct the process. Then, it has to be taken into account that not all participants in the GSC have the same motivation towards a standard. As a result, it is expected that conflict of interests easily arise. If we were able to formulate an enforceable contract, it would be easier to control opportunism. But, contracts, and so standards, use to be incomplete (Pedersen & Andersen, 2006). In fact, due to this weakness in content and control of compliance, it is considered that standards can be a handicap for sustainability (Giovannucci & Ponte, 2005).

But, the criticisms do not only arise from the first stages of a standard development. Apart from the problems in creation, content and compliance control tools many are the judgements about their application. For example it has been found that a lot of standards are used merely for green washing (Waldman & Kerr, 2014). This means that they are used primarily as marketing and competitive instruments. Connected to this term, the quality of implementation was also commented by Christmann & Taylor (2006). The authors highlighted the fact that a company can apply a standard in an extremely unsubstantial way, resulting in poor outcomes. Therefore, it can be deduced that SSs are not always efficient with regard to sustainability.

Among all the standards, B2B schemes used to be more successful than the ones designed for the final consumers. However, they are in many occasions driven by retailer's profit motive and are sometimes a prerequisite for gaining market access (Giovannucci & Ponte, 2005; Henson & Reardon, 2005; Henson & Humphrey, 2010; Waldman & Kerr, 2014) instead of being used for pursuing the actual objectives of the scheme. Despite the abundant critiques about their real effectiveness, the number of organizations creating and implementing SSs between companies continues growing (Lawrence, 2003; Sarkis, 2003; Getz & Shreck, 2006). New programmes are born every year within different sectors with the purpose, in theory, of improving sustainability issues of production processes.

1.2 Problem

Agri-business has a lot of 'wicked-problems', defined in IFAMR as those that *"are highly complex, have innumerable and undefined causes, and are difficult to understand and frame"* (Dentoni *et al.,* 2012, 2). Some examples can be loss of biodiversity or persisting poverty in many areas of the world. Due to this reason, in the agro-food sector the number of labels, certifications and standards concerning responsible practices are prominently growing (Henson & Reardon, 2005; Waldman & Kerr, 2014). This results in changes in SC actors' engagement and collaborations, due to the tight links between them. Many believe that agri-business should engage in dialogue with different stakeholders from both, outside and inside the SC for better performance (*ibid.*). Specially, partnerships start being very valuable lately due to their potential in solving agricultural global sustainability problems (Dentoni *et al.,* 2012). One example among the already existing partnerships in the sector is the Round Table on Responsible Soy (RTRS).

Lately, soybean production, and its attached wicked-problems, has cached a lot of attention among other agricultural products. With so many uses, soy has become a major global commodity and its production is characterized for having a lot of controversies. It classified as an unsustainable monoculture system, relying on a very small number of genetic variants, cultivars and planted over gigantic areas for a large number of consecutive years (Meyer & Cederberg, 2013). In front of this situation, and due to pressure and initiative from different parties, the first RTRS workshop was celebrated. The main objective of the meeting was to *''develop and perfect criteria and indicators for sustainable soy production''* (www, Responsiblesoy, 4) and ended up creating a standard.

The scheme born from this collaboration was approved in year 2010 (WWF, 2012) and continuous to be active. Its guidelines include five different sections (www, Responsiblesoy, 5). By the combination and fulfilment of all of them, the RTRS pursues a 'responsible' soy production. These five groups of instructions are the following: legal compliance and good business practices, responsible labour conditions, responsible community relations, environmental responsibility and good agricultural practice (*ibid.*) Also, the three pillars of the TBL are present: RTRS is *"applicable on a worldwide level that assures soy production that is environmentally correct, socially appropriate and economically feasible"* (www, Responsiblesoy, 1).

But, SC standards have being proved to be extremely challenge in soybean production. For instance, it has been found that they do not ensure pollution limitation (Waldman & Kerr, 2014). In the particular case of RTRS, many are doubts about its effectiveness regarding sustainability. For example, according to Hospes *et al.* (2012), the standard increased rivalry among partners and negatively affected the production of more responsible soy. In addition, it has been criticized for following strategic reasons, as pursuing market power, rather than sustainability (www, ASEED, 2). But, probably, the main source of critique is that Genetically Modified (GM) soy is accepted by the standard. The reasoning for RTRS to be applied to all kinds of soybeans is that GM crops represent a large proportion (over 70 %) of the total soy production (WWF, 2012, 7). Because of that, in the case of only considering conventional crops RTRS scope would be very limited. Still, this defence does not sound convincing to many critics, weakening the trust in the standard capability even more.

Regardless of the critiques, many are the players in the soy SC that support the standard and require their suppliers to comply with it. One example is the Swedish farmers' cooperative group Lantmännen. The group imports soy to Sweden solely from Brazil. At the moment, more than 60 % of this soy is certified by RTRS multi-stakeholder standard (www, Lantmännen, 4). And the goal of the organization is to increase this percentage to 100 % during the current year 2015 (*ibid.).* The cooperative clearly supports RTRS standard and says that it is a good tool for coping with soy production issues. As Sweden is characterized by having a big concern about the environment and human wellbeing, it could be expected that Lantmännen cooperative make use of RTRS for confronting responsibility as they communicate.

But, the ample critiques to the standard indicate doubts that sustainability awareness is the main driver for Lantmännen to use it. Other hidden reasons for the cooperative to require suppliers' compliance with RTRS are suspected to exist.

1.3 Aim

This thesis tries to influence the way in which society in general, consumers, governments, business and other organizations see reality. A critical eye on Sustainability Business to Business Private Standards (SB2BPS) is desire in this case. In particular, suspicious thinking about sustainability awareness as a driver for these standards implementation is pursued trough a critical approach.

Thus, the aim of this study is to investigate the reasons why a SB2BPS is applied by some organizations despite the critiques, which are normally based on empirical evidence. The objective is to provide a picture of the potential drivers that make a company to use this kind of standards in those specific situations in which their sustainability objectives are not pursued and even truncated.

The study is focused on Lantmännen, the Swedish farmers' cooperative that imports RTRS certified soy from Brazil. It is considered that the cooperative is a suitable and representative focal organization for the purpose of this research for the following reasons:

- The controversy of soy production
- The specifically attention paid to Brazilian fields
- Sweden societal norms about sustainability
- Lantmännen relevance in the Swedish soy market
- Lantmännen's main focus in improving the sustainability of their soy SC
- Lantmännen's commitment with RTRS standard

The research question of special interest is:

> Why does Lantmännen apply RTRS standard in its soy SC despite its doubtful effects on sustainability?

1.4 Delimitations

The investigation has certain delimitations that narrow it in scope (Creswell, 2013). Binding the case ensures that the research remains reasonable in expand and briefly argumentation for these boundaries is then provided.

First of all, the amount and span of standards have augmented radically making more difficult to talk as standards as a whole (Nadvi, 2008). A general investigation might not be accurate, as it would obviate decisive characteristics of the different schemes. So, the study does not consider all kinds of standards due to their vast variety and divergence; focusing in a particular set of standards is needed instead. For this reason this project centres solely in SB2BPS from the beginning.

Also, and despite Yin (1994) defends that multiple-case study should always be preferred, only one case study is analysed in this research. But, focusing in a particular example has a motive: a complete and deeper understanding of the specific situation can be achieved. As stated by Bryman (1989, 173), the aim of a case study is to *"engender patterns and linkages*

of theoretical importance" rather than make general conclusions. And Stake and Savolainen (1995) defend that a single-case study is valuable as such.

Therefore, the result cannot be generalized blindly as it will be attached to individual circumstances. A single-case study binds the research to a specific place (Creswell, 2013), industry (Stake & Savolainen, 1995), context (Huberman & Miles, 1994), product and standard. In consequence, the selection of RTRS standard as a representative example of SB2BPSs, limits the project to the agricultural Swedish market of soy.

On top, within the selected case study, Lantmännen cooperative is picked as focal company. This means that its perspective is the only one taken into account and farmers' or other stakeholders groups' views on the topic are not treated. It would be interesting to include them but due to the scope of the project, they are suggested as future research instead.

In addition, the time perspective is located in present time, with the actual market situation to be considered. Due to the quick changes in the world in general, and in particular of the topic of interest, it is relevant to be updated and consider a recent or current scenario.

The literature review and the selected theories restrict the scope to a "needed area of inquiry" (Creswell, 2013, 25). They build the basis of the project and also restrict the process and, as a result, its final findings and conclusions. As a deductive approach is followed, they determine the aspects to be studied, which would be different if other viewpoint and theoretical framework were used. The same way, the research approach, and especially the philosophical ideas, influence the practice of research (Slife & Williams, 1995).

1.5 Outline

The outline for the coming chapters is represented by *Figure 1* and the content of each of them is briefly described right after. The present chapter, the *Introduction*, includes a description of the existing problem and the aim of the research regarding it. After, a *Theoretical Framework* and a *Literature Review* are presented; the relevant existing studies related to the field of interest are cited and a conceptual framework is build based on them. Thereafter, the *Method* chapter includes the research design, the data collection and analysis and the credibility of the study is proved. Next section, presents the *Background* of the investigation for better understanding of the case. After, the empirical study *Results* are provided. Then, the results are related to the literature review and theoretical framework in the *Analysis and Discussion* chapter; the collected data is examined related to the topic of interested. The project finishes with the *Conclusions*, answering the research aim presented in *Chapter 1* and suggesting topics for further research in the field.

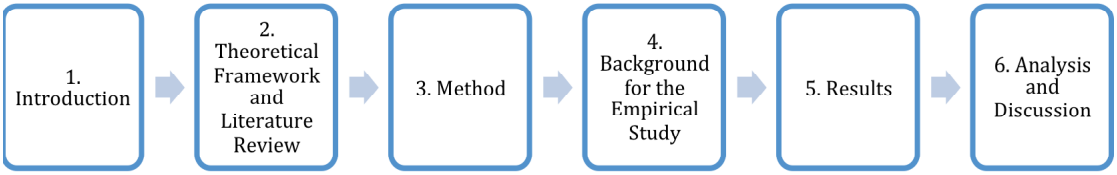

Figure 1. Illustration of the outline of the study (Own elaboration)

2 Theoretical framework and literature review

Chapter 2 starts with a brief introduction to the TBL theory and the term of 'sustainability awareness'. Them, it provides a literature review about standards schemes and their correspondent certificates in general. Also, the agricultural PSs importance nowadays is highlighted. Critiques and strengths for SB2BPS identified in literature are recapitulated as well. Despite due to the newness of sustainability SC research there is not much theory within the discipline (Halldorsson et al., 2007; Seuring and Muller, 2008; Pagell & Wu, 2009), Stakeholder theory was found to be strongly connected with the topic of study. This theory is used as point of departure for building the conceptual framework about the potential drivers for SB2BPS that closes the chapter.

2.1 The Triple Bottom Line and sustainability awareness

The TBL is one of the new theories of sustainable development, created by John Elkington in 1994. More concretely, the TBL is an accounting framework through which a company takes a responsible position (Govindan *et al.,* 2013). Sustainable development is the basis of the concept, and it was defined at first time in 1987 by Brundtland Commission as the *''development that meets the needs of the present without compromising the ability of future generations to meet their own needs''* (Burton, 1987, 45).

The TBL assessment is also called 'Integrated assessment' and 'Sustainability assessment' (Hacking & Guthrie, 2007). The creator of the concept states that, for achieving true sustainability in business, companies have to take a responsible position regarding economic, environmental and social aspects. The three pillars must receive parity of treatment; the financial aspect is not anymore the centre as traditionally. As a result, this responsibility lies to stakeholders rather than shareholders (Robins, 2006). These stakeholders compile all parties that are related with the company in a way. They are represented in the Stakeholder theory presented and explained later in this chapter.

The TBL can them be used as a measure for the sustainability awareness of a firm regarding its stakeholders. Awareness is defined as "*the quality or state of being aware, consciousness"* (www, OxfordEnglishDictionary). So, sustainability awareness refers to the state of being concern and mindful about sustainability issues. It can be conclude that a company is aware about sustainability when the three components of the TBL receive the same dedication within the company.

2.2 Standards and certificates

*"A **standard** is a document that provides requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes and services are fit for their purpose"* (www, ISO). While a **certificate** can be defined as a written guarantee that a product or service or a process comply with the applicable standard(s); they are used for communication between seller and buyer (Aerni, 2013).

Standards, and their related certificates, started being used from the industrial revolution (19th century) to "*reduce uncertainty, manage reputation, enhance market reach, control quality*

and fuel innovation" (Aerni, 20013, 3). NGOs, investors and consumers asking for accountability and transparency to multinationals' activities lead to a boost of standards and certificates creation in the 90s (Neef, 2004). Also, the globalized nature of SCs made the traditional methods of control obsolete (Cadman, 2011). New issues arise when expanding to areas with different contexts; domestic industries are not able to manage global production process and standards born as a result. Thus, establishing, monitoring and verifying standards have been gaining importance in SCM (Giovannucci & Ponte, 2005; Corbett & Klassen 2006; Pedersen & Andersen, 2006; Vogel, 2008).

They are valuable for credence products and in situations of asymmetry of information (Washington & Ababouch, 2011). It has to be taken into account that sustainable products have many credence qualities, those that can never be fully evaluated by consumer (Belz & Peattie, 2009), even after usage. As they cannot be judged or inspected (Darby & Karni, 1973), consumers need to use 3rd party evaluation for corroborating them (Belz & Peattie, 2009; Henson & Humphrey, 2010). So, certificates perform verification of these qualities in order to maintain credibility.

At the beginning standards and certificates were created by individual companies, but they were not trustful; self-assessment would not be a credible judgment (Washington & Ababouch, 2011). The need for certification born mainly from consumer's scepticism and media scrutiny (Aerni, 2013). Fort instance, certification can be a way of sharing Environmental Management Information (EMI) for reducing uncertainty and gaining awareness (Lai *et al*., 2014) and 3rd party organizations started creating performance standards that can be used more universally by all companies (Zsidisin & Siferd, 2001; Neef, 2004). Nowadays, and regardless the industry, any company is probably pushed to comply with a code offered by 3rd parties (Neef, 2004). It can be concluded that having an independent audit will contribute to trust by other stakeholders so enough attention should be paid to it.
Furthermore, companies look now at certification in a much more strategic way (Diabat & Govindan, 2011; Steering Committee, 2012).

2.2.1 Classification of standards

Standards have been classified in the literature considering several aspects. The most popular classifications were done according to:

- *The content (Washington & Ababouch, 2011; Carlsson & Johansson, 2013)*

·Related to products: specify product attributes, the quality and safety of the good.
·Related to processes: specify production processes. This type of standards has been more popular since the end of the 20th century.

- *The aspects they are focused in (Aerni, 2013)*

·Sustainability standards: "*provide detailed technical specifications setting social and environmental characteristics for the production process itself, with clear reference to the three pillars of sustainable development"* (Daviron & Vagneron, 2011, 91). The social branch try to ensure minimum levels of workers safety, wage or health while the environmental one try to minimize the use of chemicals, nutrients or energy.
·Others: technical, quality, safety or learning standards for example.

- *The participants (Vorley, 2001; Washington & Ababouch, 2011; Aerni, 2013; Carlsson & Johansson, 2013)*

·B2C (Business-to-Consumers): between a company and its final consumer. Labels use to be used for differentiation and communication.
·B2B (Business-to-Business): between two companies. They are not communicated to the latter through labels and are used for risk management of production. Most of the existing standards are of this type.

- *Who sets the standard (Vorley, 2001; Henson & Humphrey, 2010)*

·Individual/company-specific: set by a single firm and adopted along its own SC.
·Collective/commodity-specific: set by collective organizations and adopted in the whole sector of such commodity.

- *Governance (Washington & Ababouch, 2011; Steering Committee, 2012; Aerni, 2013; Carlsson & Johansson, 2013)*

·Public: set by authorities. They are subject to WTO disciplines.
·Private: set by private organizations. As shown in *Figure 2* below, they can be even more stringent than public ones. However, they are not subject to WTO disciplines. According to Roberts (2009, 3), PS *"provide governance without governments; they are rules and structures by which individuals, communities, firms, civic organizations and other entities govern their interests without the direct involvement of the state or its subsidiaries"*.

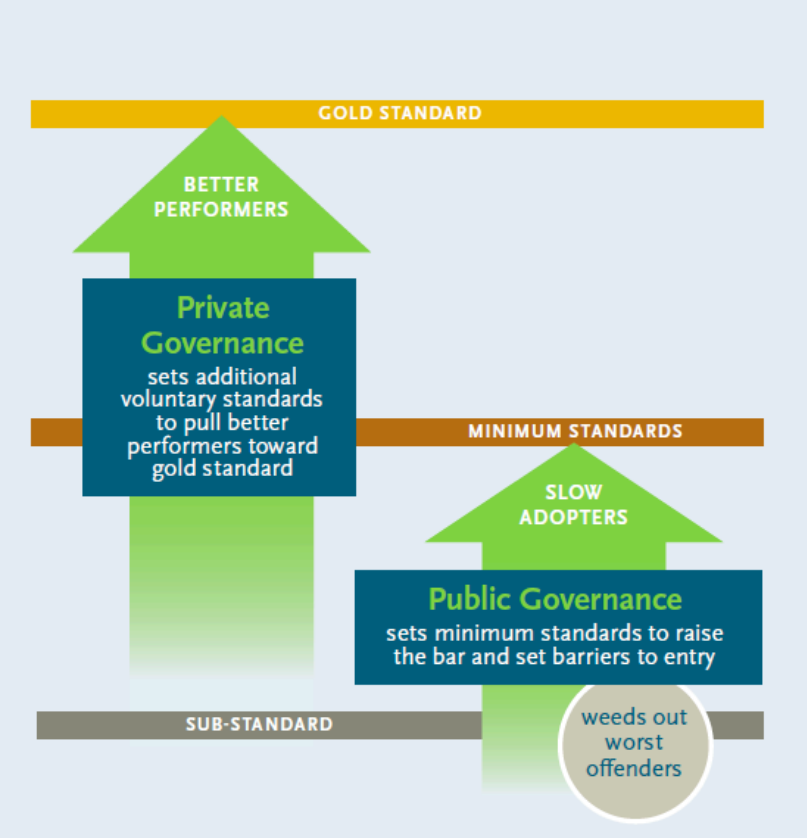

Figure 2. Roles for public and private governance (Steering Committee, 2012, 84)

2.2.2 Standards in the agricultural sector

"Agricultural production has potentially negative consequences for the environment, farm livestock, farmers themselves and their employees, which raises concerns for environmental protection, animal welfare and decent working and living conditions" (Carlsson & Johansson, 2013, 13). Due to this reason, PSs started growing in last decades in industrialized countries for market governance, especially in the agricultural sector (Henson & Humphrey, 2010). Furthermore, increasingly, SCs for agricultural and food products extends beyond national boundaries (*ibid.*). Hence, the need for sustainability was and still being more emphasized in agriculture than in any other sector.

Agricultural standards evolved from 'multi-sectorial' to 'crop-specific' and nowadays it is not common for companies within the sector to develop an own standard (Daviron & Vagneron, 2011). For ensuring credibility, standards developed by NGOs and stakeholders groups use to be adopted. Additionally, lower costs and more expertise are attached to standards set outside the company (*ibid.*).

2.3 SB2BPS strengths

Some literature focuses on SB2BPS standards and certifications strengths and has found several possible positive outcomes. The most relevant are catalogued in this section.

First of all, SSs can actually comply with their objectives and lead to a better environmental and social theory and practice. They can play a role in promoting and securing sustainability (Getz & Shreck, 2006; Aerni, 2013). Also, they can increase the focus in social and environmental concerns and boost national regulations for being more stringent (Nadvi, 2008). This would lead to more, voluntary and mandatory, sustainable practices by society and governments.

Taking a worldwide perspective, some advantages can be mentioned. SB2BPS can ensure efficiency in a globalized world (*ibid.*); they can, for example, set internationally accepted guidelines that reduce time in transactions among countries. Moreover, according to ISO webpage, developing countries suppliers subject to a PS can beneficiated by knowledge and technology transfer from develop countries. This means that they can cultivate capabilities and improve innovation skills. Likewise, there is empirical evidence that supports that smallholders benefit from PS implementation; for example, they earn more revenues (Asfaw *et al.,* 2010). So, even the most unfavourable groups have the possibility of attaining some convenience. Furthermore, social standards have received a lot of attention and it has been found that PS can improve workers wellbeing (Barrientos *et al.*, 2003) and that they can bring workers the possibility of exercising their rights (Riisgaard, 2009).

From a business perspective, SB2BPS can have great gains in several aspects as well. Dowell *et al.* (2000), found that firms with more stringent standards enjoy higher market values. They support that environmental performance is strongly linked with profitability, especially in the long term, and other tangible and intangible benefits. Furthermore, standardization decreases transaction costs, can be a source of competitiveness and then can help entering certain markets (Jaffee & Henson, 2005). Then, SB2BPS work as a differentiation tool and *"they can provide a basis for new marketing niches"* (Nadvi, 2008, 326). Getz and Shreck (2006) also supported this idea and added that companies could establish higher prices and enjoy greater

revenues. On top of this, SB2BPS can reduce uncertainty in Global Value Chains (GVCs) (Aerni, 2013) making easier the decision-making processes.

2.4 SB2BPS critiques

It has been found that SSs and their correlated certifications are not always translated in benefits for the environment and society. Several possible drawbacks of SB2BPS have been discussed in the literature and enumerated and detailed hereafter. Some of them are particularly focus in the industry of interest, the agricultural sector. Also, some critiques are specific for environmental or for social issues rather than for sustainability in general.

- *Multiplicity of standards*

There is no single definition for 'standard' that represents all the possible forms the term can take (Henson & Humphrey, 2010); there are many different PSs a supplier can choose. Manning *et al.* (2012) remark that we still do not understand the reason for this multiplicity of SSs. On the one hand, this is beneficial for suppliers as they choose the one that better fits its particular conditions. On the other hand, distinct buyers can request different PSs and suppliers are not always able to comply with all of them. This is the problem of not having a comparable and general accepted set of standards (Neef, 2004; Carlsson & Johansson, 2013). And, it can be concluded that to adhere to a universally accepted standard is cheaper than continue to have multiple.

- *Privatization of traditionally public norms*

Areas that traditionally were run by public regulations are now under private modes of governance (Henson & Caswell, 1999; Schouten *et al.,* 2012). Standards started taking tasks from official bodies and deciding about issues that were in government hands before. Also, law gaps are quickly filled by standards leading the government not taking action. Furthermore, this is seen as a driver for companies to acquire a standard; if they do so, they hinder the creation of legal rules that my have, for example, worse consequences in case of compliance failure (Turner & O'Neill, 2007; Platje *et al.,* 2008; Vogel, 2008; Steering Committee, 2012).

In the case of social standards, Riisgaard (2009) see them as a 'privatization of labour law' that avoids regulation and trade unions. Thus, collective bargaining can be replaced by social standards and the more stringent they are the further influence in labour.

- *'De facto mandatory'*

Even PSs are voluntary, in many occasions they are considered mandatory in practice. This means that possessing such standards is a prerequisite for becoming part of a certain market and, as a result, an obligation for new entrants and already existing participants (Christmann & Taylor, 2001; Vitalis, 2002; Washington & Ababouch, 2011; Carlsson & Johansson, 2013). Waldman & Kerr (2014) assert that, even they are not legal requirements, B2B standards are driven by retailer's profit motive and are sometimes a perquisite for gaining market access. One example is the KKM standard for milk, applied by Dutch dairy farmers, which has a presence of almost 100 % in the market (Jongeneel, 2006).

If they are 'de facto mandatory' for producers within and outside the country, differences across countries can decrease (Carlsson & Johansson, 2013). So, competitiveness created by different legislation may be mitigated. It has to be considered that national legislation can only be applied to domestic production, but standards can go beyond borders. Daviron and Vagneron (2011,92) go even further and consider that "*standardization and commoditization are seen as closely intertwined processes".*

- *Rigidity*

The standards follow the rule 'one size fits all' (Vitalis, 2002); differentiation in processes from one part of the world to another is not made. SSs are not related to the governance structure of the SC (Riisgaard, 2009). In the same path, environmental certification is not flexible to respond to varied and complex ecological, economic and socio-cultural context (Getz & Shreck, 2006). This rigidity can alter social relations and rises socio-economic stratification within small farmers communities (*ibid.*). These different contexts and companies' characteristics cannot be treated in the same way. Thus, flexibility and adaptability to each SC features would be optimal for an efficient implementation of a standard.

- *Lack of democracy in participation*

The lack of democracy appears in many ways when talking about standards. Small and from undeveloped countries farmers are the most discriminated player in the SCs.

Some suppliers do not possess the means and capabilities for complying with a certain PS. Normally, the smaller the supplier the lower the possibilities to do it (Hatanaka *et al.,* 2005; Colen *et al.* 2012; Aerni, 2013). Furthermore, small farmers have normally more difficulties understanding certification guides (Getz & Shreck, 2006), so participation in the scheme is truncated if they do not receive support. As it is known, standards require costs and it can be a disadvantage for small producers (Aerni, 2013); they do not enjoy same level of resources as bigger firms and therefore the costs are much more complicate to cover for them. Despite Neef (2004) defends that the cost of standards is not greater than the cost of financial reporting and requires less infrastructure, a standard has to be economically viable for being successful anyways. When considering the cost paid for establishing a scheme, its effectiveness and what it gives back to the company has to be taken into account. In consequence, checking if the standard norms lead to the pursuit objectives is key (Waldman & Kerr, 2014). Regarding small farmers discrimination, and according to Allen and Kovach (2000), standards future can turn in two directions. On the one hand, they can become stricter and suppose a barrier to large and uncommitted farms. On the other hand, evolution can take the opposite path and become more conducive to large firms entering the market.

Besides, it has been proved that PSs can exclude developing countries (Vitalis, 2002; Henson & Humphrey, 2010). However, Herzfeld *et al.* (2011) do not think that PSs can keep out them per se but they support that PSs can hinder developing countries' entry barriers. Furthermore, the expansion and tightening of PSs causes barriers to developing countries' exports (Unnevehr, 2000). Disparities are clear between developing and developed countries; these differences can be seen in governance and decision-making bodies and also in monitoring and evaluation teams. Normally, standards setters are from developed countries and the ones implementing them are from developing areas (Fuchs *et al.*, 2011). More concretely, when talking about social standards, labour unions would be expected to take active part in PS and

fight for labour rights. However, until now, PSs creation processes has been carried out by firms and NGOs (Riisgaard, 2009). So, workers are seen as passive agents that have to be managed. The cases when labour unions take part in social standards use to be multi-stakeholder initiatives. But, despite they are present in the setting phase they infrequently participate in the implementation and monitoring stages (*ibid.*).

- *Do not take into account farmers experience in the context*

Certification creates a disconnection between the standards and the lived experience of small farmers (Getz & Shreck, 2006; Aerni, 2013). Farmers have practical experience in their region and often standards apply totally different ways-of-doing without keeping in mind the context and the already tested practices they use.

- *Gender inequalities*

A study presented by Tallontire *et al.* (2005) showed that social standards do not address the concerns of female workers. In a previous occasion, together with other authors, Tallontire found that the labour is divided in 'productive' and 'reproductive' and that women first obligation is to comply with the latter one (Barrientos *et al.,* 2003). This fact makes women work in the informal market and standards use to exist only in formal ones. Hence, it can be said that social standards are less likely to be applied to women than to men.

- *Weak content and implementation*

Many standards are weak in content and implementation. For example, Riisgaard (2009) states that social standards are only applied to the workers at the end of the chain in many cases, without considering workers in other nodes. According to Green (2005), SSs are 'watering down', meaning that they become less stringent than before. The author states that this phenomenon is such that making things auditable is even more important than the actual content of the standard. So, 3rd party certification and the ability to report receive more effort and attention than sustainability itself.

- *Misleading certification*

There exist several studies concluding that certification does not improve firm performance in the issues concerning the standard. For example, King *et al.* (2005) detected that firms having a weaker environmental performance were more probable to obtain ISO certification. Also, Christmann and Taylor (2006) stated that 3rd party audits are not sufficient for effective implementation of a standard. In their study, the authors highlighted the questionable auditor qualification and independence. Auditors use to have lack of knowledge, both technical and about the business. Also, the auditing process is very subjective; the same firm can be or not certified depending on the auditor. Normally, auditors are not independent of the company to be certified, as the latter is the one selecting and paying them (*ibid.*). Then, for not loosing clients, auditors may be puss to certify companies that do not fully follow the standard guides. They also proved that, in some occasions, audits are not done often enough and visiting the factory from time to time does not allow checking daily operations.

Accordingly, it can be assumed that certification may not guarantee a firm's ongoing compliance with a certain standard and that consumers cannot rely on certificates for knowing about suppliers' conduct.

- *Buyer-driven*

A SC can be governed in two different ways depending on who has the authority and power: producer-driven and buyer-driven (Riisgaard, 2009). In the latter case, the buyer decides about what and how its out-sourced product is created. Normally, buyer-driven standards have as main goal to maintain a corporate reputation rather than manage sustainability, especially in the case of B2C standards (Aerni, 2013). On top, this reputation depends on the media message instead on actual performance. So, logically, they may not foment real innovation and sustainable performance in the agricultural sector (*ibid.*).

- *Green washing*

"It's green washing when a company or organization spends more time and money claiming to be 'green' through advertising and marketing than actually implementing business practices that minimize environmental impact" (www, Greenwashingindex). It has been found that a lot of standards are used merely for this purpose (Waldman & Kerr, 2014). So the efficiency of the standard in pursuing environmental goals is not considered the main objective, as it is expected. Instead, they are used as a marketing tool and deviate agro-ecology values to commercial strategies (Goulet & Meynard, 2014).

- *Quality of implementation*

The quality of standard implementation ranges from 'symbolic', where firms fail to use the practices prescribed by a certified standard in daily operations, to 'substantive', where firms consistently use the certified standard's practices (Christmann & Taylor, 2006). The authors assume that a symbolic implementation will be cheaper; therefore, substantive implementations will only take place if they expect further benefit that the ones arising from a symbolic certification. Therefore, a symbolic strategy can clearly be connected with the green washing term, mentioned before in this section. Joining the standard would only have communicative objectives and real action would not occur. However, measuring a standard implementation level and determine if it is effective or not is difficult; checking if it is the mean for achieving the desired change is needed. This effectiveness is linked to improvements in all aspects of the TBL (Waldman & Kerr, 2014).

2.5 Drivers for SB2BPS

2.5.1 Stakeholder theory

Stakeholder theory is categorized as a good scheme for explaining management behavior (Roberts, 2003). A stakeholder is defined as any group that can affect and/or is affected by the achievement of a firm's objectives (Freeman, 1984). Stakeholders can be internal or external to the company. Roberts (2003) made an interpretation of the original Stakeholder theory developed by Freeman concluding with the following *Figure 3*.

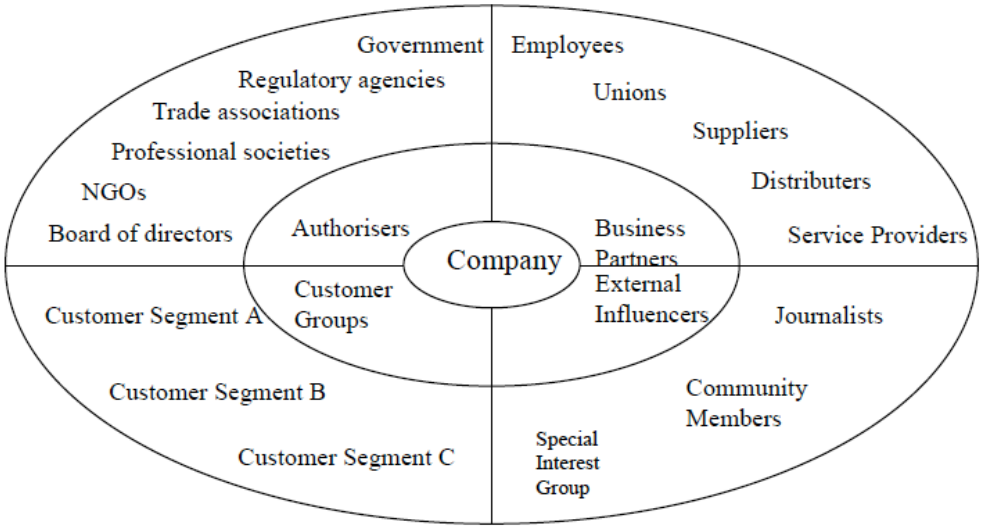

Figure 3. Corporate different stakeholders groups (Roberts, 2003, 162)

As it can be seen in the chart, the author differentiates between four groups of stakeholders: *authorisers, business partners, external influence* and *customers groups*. Within the first group the government or regulatory agencies can, for example, be found. In the second group it should be highlighted the presence of suppliers. Among, external influencers, NGOs interested about environmental and social issues. Finally, all different customers are significant, as the revenues of the company come mainly from them. All this players, connected somehow with the company, can affect managerial decisions in many and divergent ways. Not all actors will have the same level of influence for each firm and they can be interlinked. Based on this theory, it is assumed that the decision of acquiring a SB2BPS is a managerial choice influenced from both, internal and external stakeholders.

2.5.2 Conceptual framework

The reasons why a company engages in a SS are abundant and dissimilar. Some of these drivers are common in all sectors but the level of influence may differ among them (Marimon *et al.,* 2011). And, within each sector, firms perceive pressures in different ways due to disparity in, for example, structure and financial performance (Delmas & Toffel, 2004). Also, the geographical context of the company and its position in the SC affect their behaviour towards standard engagement (Manning *et al*., 2012). So, multinational companies may have different drivers among the areas they operate in.

This section collects the most relevant drivers for SB2BPS acquisition that have been mentioned in literature until the moment. Those drivers can be considered hypothesis in this research as, separately or combined, all of them can contribute to the managerial decision of participating in SB2BPS. It has to be considered that the causal relationship is not direct and, normally, several drivers are interlinked and together boost the standard acquisition.

A conceptual framework has been built and used later as a tool for data analysis. Stakeholder theory, presented above, is taken as starting point. Following it, drivers are classified in two main groups: internal and external. Also, the scheme provided by the Steering Committee of

the State-of-Knowledge Assessment of Standards and Certification (2012) was used as a base. Furthermore, motivators and benefits for standards in general and for specific schemes, mainly for the popular ISO, have been considered and used for the framework building. The framework is summarized in *Tables 1 and 2* and further explanation of terms can be found after the correspondent table. References for each specifics driver are listed in the table for visual reasons.

Table 1. Internal drivers for business engagement in a SS (Own elaboration)

INTERNAL DRIVERS		
ORGANIZATIONAL ADVANTAGE	*Company learning*	ISO (www) Steering Committee (2012)
	Human capital	Matuszak-Flejszman (2009) Steering Committee (2012)
	Benchmark	Matthews (2003) Steering Committee (2012)
	Organizational relationships	Gotzamani & Tsiotras (2002) Briggs (2007) Steering Committee (2012)
SUPPLIER PRESSURES	*Security of supply*	Van Huijstee & Glasbergen (2008) Henson & Humphrey (2010) Steering Committee (2012)
	Supply- side efficiency	Subramani (2004) Matuszak-Flejszman (2009) Steering Committee (2012)
	Traceability	Thakur & Hurburgh (2009) Steering Committee (2012)
	Supply-side costs	Jaffee & Henson (2005) Steering Committee (2012)
NORMATIVE INCENTIVES	*Personal*	Egri & Herman (2000) Steering Committee (2012)
	Societal	Perkins & Neumayer, 2010) Steering Committee (2012)
	Industry	Jones *et al.* (1997) Singels *et al.* (2001) Delmas & Toffel (2004) Steering Committee (2012)

Internal drivers are those arising within a company. The authors mentioning the most salient ones are presented in *Table 1* and grouped in three main classes: *organizational advantage, supplier pressures and normative incentives.*

There have been identified several **organizational advantages** from being involve in a standard. For example, learning about social and environmental issues that may be present in the firm's SC. Knowledge about then can be difficult, and more costly, to obtain through other means. Also, workers awareness regarding sustainability issues, motivation and satisfaction can be positively affected leading to a better performance of the human capital. Moreover, as Matthews (2003, 1) said, "*corporate environmental benchmarking is difficult*

with the range of inconsistency of environmental information available" and taking a standard as guide is very convenient for internal measures and within the company relationships. In addition, relationships with other stakeholders and partnerships can improve when sharing sustainability concerns.

Additionally, ensuring that a company **supplies** follow certain sustainable features is important along the whole SC. Standards, suppliers partnership and discussions are used as tools for managing the possible risks arising from provisions; by using them the company can ensure the security of the inputs. Also, specificity of tasks making suppliers comply with certain standard may contribute to efficiency in their operations and, as a result, decrease costs. By forcing them to follow specific rules, the company can trace the production process and easily prove the chain of custody.

Yet, **norms** around the company strongly influence the attitudes towards SSs. These norms vary considerably among countries and cultures and are extremely influenced by education. Personal concerns and moral of managers and other individuals in the company make them to take, or not, initiative. Also, society values and tradition and expectations about companies' performance will determine the severity of punishments and rewards. Specific sector habits and pressures from competitors exist as well; in some cases, having a certificate is even a requisite for participating in an industry. For the mentioned reasons, personal, societal and industry customs can motivate standards usage.

Table 2. External drivers for business engagement in a SS (Own elaboration)

EXTERNAL DRIVERS		
BUYER PRESSURES	*B2C demand*	Jones *et al.* (1997) Singels *et al.* (2001) Christmann & Taylor (2006) Peng & Lin (2007) Belz & Peattie (2009) Koszewska (2010) Delmas & Toffel (2004) Steering Committee (2012) Aerni (2013) Waldman & Kerr (2014)
	B2B demand	Delmas & Toffel (2004) Christmann & Taylor (2006) Steering Committee (2012) Aerni (2013)
MARKET PRESSURES	*Differentiation*	Singels *et al.* (2001) Delmas & Toffel (2004) Turner & O'Neill (2007) Nadvi (2008) Henson & Humphrey (2010) Koszewska (2010) Steering Committee (2012) Aerni (2013)
	Brand value	Jones *et al.* (1997) Singels *et al.* (2001) Whitelaw (2004)

		Chen (2009) Steering Committee (2012) Aerni (2013)
	Reputation	Gotzamani & Tsiotras (2002) Turner & O'Neill (2007) Chen (2009) Waldman & Kerr (2014)
	Increase market share and entering new markets	Singels *et al.* (2001) Hatanaka *et al.* (2005) Jaffee & Henson (2005) Matuszak-Flejszman (2009) Chen (2009) Steering Committee (2012)
SOCIETY PRESSURES	*NGO activism*	Turner & O'Neill (2007) Delmas & Toffel (2004) Steering Committee (2012) Waldman & Kerr (2014)
	NGO engagement	Matuszak-Flejszman (2009) Delmas & Toffel (2004) Steering Committee (2012) Waldman & Kerr (2014)
REGULATORY PRESSURE	*Pre-emption of regulation*	Turner & O'Neill (2007) Platje *et al.* (2008) Vogel (2008) Steering Committee (2012)
	Compliance costs	Delmas & Toffel (2004) Steering Committee (2012)
	Regulatory consistency	Singels *et al.* (2001) Briggs (2007) Matuszak-Flejszman (2009) Steering Committee (2012)
	Barriers to entry	Turner & O'Neill (2007) Steering Committee (2012)
	Reduction in tort liability	Steering Committee (2012)
INVESTOR PRESSURES	*Communication*	Steering Committee (2012)
	Shareholder resolutions	Steering Committee (2012)

External drivers are those arising from outside the company structure. A study by Wang (2009) concludes that, despite the direct contact with internal stakeholder, external groups are relevant and cannot be ignored when talking about a company's responsibility decisions. The most relevant external drivers are collected in five different groups in *Table 2* above and explained thereafter.

First of all, **buyers**' purchasing power and their preferences are extremely relevant for a firm as its survival depends on consumers' demand. When talking about B2C, a boom of the popularly called 'green consumers' can be seen; conscious individuals caring about the sustainability of their purchases. Also, in B2B sales, "*the importance that customers place on the issue address by a standard affects suppliers' incentives for substantive implementation*"

(Christmann & Taylor, 2006, 867). In addition, SC intermediaries, as retailers for example, demanding a B2B standard can be influenced by demands of final consumers.

The **market** in which the company operates is crucial too. By applying a standard, the firm has the possibility of creating differentiate products and gaining competitive advantage. As a result, generating added value and increasing market share. Standards make visible company concerns about environmental and social issues and can attract conscious consumers. Besides, reputation of the company is likely to improve and Waldman and Kerr (2014, 435) consider that *"mitigating reputational risk can be very significant driver of environmental change"*. Similarly, a research by LaFrance and Lehmann (2005) concluded that legitimacy, closely related with corporate image, is the main driver for companies to engage in partnerships with NGOs on sustainable development initiatives.

In addition, pressure from **society** exists and comes mainly from NGO's. There are two ways in which they can act for making companies comprise with certain standards. Sometimes, they act against businesses bringing attention to their bad actions. By doing so, they can damage a company's reputation using different tools. So, companies use standards to protect themselves against claims for remissness in social and environmental issues. On the contrary, in some occasions they cooperate with firms. Mutual learning and building capacity as well as greater reputation are some advantages from this collaboration.

Nonetheless, **regulatory pressure** can appear in several forms. For example, companies might adopt standards in order to avoid governments to set or aggravate regulations about the issue in question. Sometimes, money saving is the main objective; using a standard as means for complying with laws may result cheaper. Additionally, and especially in the case of multinationals that has to respond to different regulatory systems across their SCs, a global standard ensures consistency and harmonized commands. Also, the adoption of a standard can be taken for fighting competition; boosting governments to set regulations that make difficult to new entrants to introduce in the market. And, complying with a standard makes more difficult to infringe a legal liability and the resulting compensation for the damages.

Last but not least, the firm can receive **pressure from investors**. Companies may adopt standards for being highly ranked by agencies and advertise themselves to conscious investors. Withal, shareholders' judgements relating to sustainability issues have a lot of power in a company decisions.

3 Method

The aim of this chapter is to give enough information of the exact steps taken to answer the research question. Complete and detail description is provided in a way that other researcher would be able to replicate the study by following such a description. Also, this chapter is useful to understand the connections between itself and the problem and results (Clegg et al., 2006). First, the literature review and theoretical framework basing the project are introduced. Then, the chosen research approach is commented in detail. Last, the credibility of the study is defended.

3.1 Literature review and theoretical framework

The study origins from a literature review, that allows the identification and evaluation of the existing research in the field and to offer insight into prior work (Blaxter *et al.* 2010). This way, it is also possible to identify the gap in literature to be covered; to identify a topic that is worth to study (Creswell, 2013). The gathered information is all second hand, which provides already scientifically proven material and considered as reliable. From this literature review the theoretical framework was identified. It grounds the conceptual framework summarized in *Tables 1 and 2.*

The Swedish University of Agricultural Science and the Uppsala University library catalogues were consulted. Likewise, Google Scholar was used as a searching tool. Furthermore, webpages of companies, especially Lantmännen's one, and NGOs were consulted. So, the revised literature review includes scientific articles, reports, books, web pages and databases. The following key words were used for the information search strategy: *certificate, driver, green purchasing/supplier, RTRS, soy, standard, SCM* and *sustainability*. In addition, cross reference method for articles collection was applied. Mainly, English language was used but Spanish and Portuguese were utilized in few occasions. All the found references that were used lately in the thesis work, were stored in the computer program Zotero.

3.2 Research approach

Creswell (2013) differentiates between three different research approaches: qualitative research, quantitative research and mixed research as it can be seen in the centre of *Figure 4* below. A qualitative approach is chosen due to the novelty and complexity of the area of study (Halinen & Törnroos, 2005; Cassell & Gummesson, 2006). As mentioned in the previous section, research on the field is limited; the topic is yet a contemporary phenomenon. Also, both internal and external factors affect management and business decisions in general, making it a complicate topic. Due to this reason, the flexibility that characterizes qualitative approaches is needed. The area of study is not known with certainty and unexpected events can occur so having an adaptable research design allow to respond to such unforeseen circumstances. Nevertheless, Huberman & Miles (1994, 147) consider, *"qualitative analysis to be a very powerful method for assessing causality"*. Trying to understand what causes the application of SB2BPS and to respond the 'why' question of specific interest presented in *Section 1.3* are pursued, so it is concluded that a qualitative judgement is adequate.

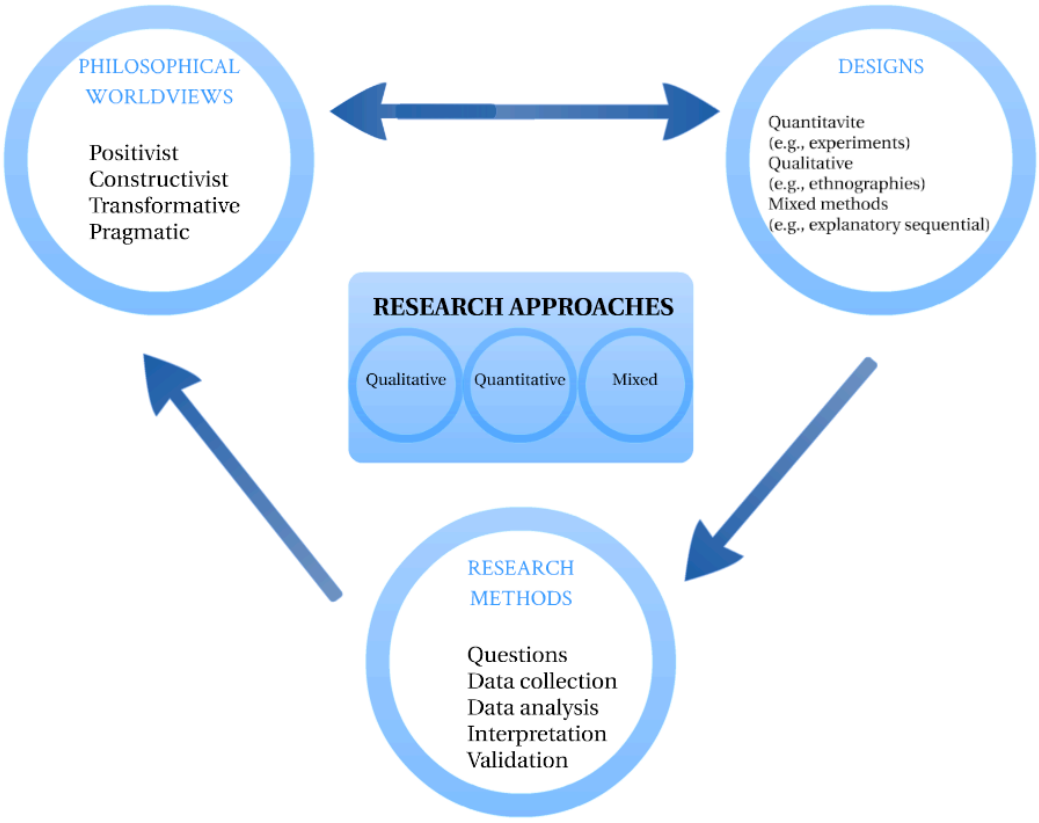

Figure 4. A framework for research: The Interconnection between Worldviews, Design and Research Methods (Own elaboration; adapted from Creswell, 2013, 5).

In the figure it can also be seen that each approach involves three components: philosophical worldviews, designs and research methods. These components will be explained in the continuous sections, where an explanation of their choice is also provided.

3.2.1 Philosophical Worldviews

These worldviews refer to the philosophical orientations that the researcher gives to the study. They are the frameworks that rule the way knowledge is analyzed and interpreted and determine the motivation for the research (Mackenzie and Knipe, 2006). The choice of philosophical worldview influences the chosen methodology so it is relevant to briefly describe it in this chapter (Creswell, 2013; Oliver, 2013).

Apart from the four worldviews presented in *Figure 4,* many other philosophical and theoretical orientations exist (Patton, 1999). Among them, a Critical theory paradigm is taken in this work; which corresponds with the Transformational philosophical worldview suggested by Creswell (2013). It claims that social science can and should contribute to the liberation of people from unnecessarily restrictive traditions, ideologies, etc. that distort satisfaction (Guba & Lincoln, 1985; Alvesson, 2003). Here 'critical' is understood as a more extensive reflection upon established ideas or ideologies, in order to liberate them from constraint and dominance relations.

The knowledge claim position is advocacy participatory; "*participatory action […] is focused on bringing about change in practices"* (Creswell, 2013, 11). Humans are the producers and not only the receivers or products of their knowledge and critical studies can contribute to society's change of mind. This kind of research can be considered emancipatory (Alvesson, 2003; Creswell, 2013), as it boosts people to break the constraints to self-development and self-determination. So, it is wanted that people considers existing phenomena with a different mind: not as natural and obvious but as odd, exotic and changeable. Clearly, the interpretative stream of epistemology is present; this work tries to understand human behaviour rather than assuming that humans are run by natural forces.

Within the business world, more and more authors are following this approach. As this study does, they defend that corporation and all modern capitalism rethinking is needed. One example is the economist and writer Naomi Klein, in her book '*No Logo'* (2000), focused on the same field as this paper. She rejects corporate social responsibility as it is consider to fail to go to the roots of the problem. Inspired by her, this thesis doubts about the efficiency of SB2BPS and tries to avoid trusting them blindly.

3.2.2 Research Design

Research design indicates the type of study that directs the procedures of the research (Creswell, 2013). Within qualitative approach, many are the available strategies among researchers can choose. Case study is one of these tools that can be used to collect and analyse empirical evidence (Yin, 1994). They "*offer depth and comprehensiveness for understanding the specific phenomenon"* (Easton, 1995, 475). So it was chosen for accomplishing the desire of an exhaustive investigation.

After analysing the already existing definitions of 'case study' in the literature, Gerring (2004, 342) propose to *"define the case study as an intensive study of a single unit for the purpose of understanding a larger class of (similar) units"*. So, case studies usually perform a double function. On the one hand, they are studies of the unit itself, RTRS standard in this occasion. On the other hand, they are case studies of a broader class of units, SB2BPS in this work. Yin (2003) classifies case studies in *descriptive, exploratory* and *explanatory* and also differentiates between *single* and *multiple* procedures. It can be concluded that an explanatory case study is applied, characterized by looking for causal links and respond to questions about why something happened. Also, as presented in *Section 1.4* as the main delimitation of this study, a single-case study (N-of-1) was conducted. However, focusing in a unique representative example is supported by Easton (2010). He believes that the rich picture provided by a single case study can offer a universal understanding that the study of multiple case studies cannot offer.

This kind of research is preferred for answering 'how' and 'why' questions (Yin, 1994), as the ones concerning this thesis. Also, it is suitable when the topic of study is new and there are still a lot of gaps in the literature (Yin, 1994; Creswell, 2013) as it happens in the field of interest. Furthermore, it is considered valuable in the study of rare phenomena (Nock *et al.,* 2007). Yet, case study is recommended when looking at the effects of organizational external environment and internal forces shaping the organizations decisions and practices (Eisenhardt, 1989), what make it be the perfect approach to cope with the Stakeholder theory in which this research is based.

The unit of analysis is based on the aim of the study and the specific research question (Robson, 2002). Taking both into account, and due to its relevance and representativeness, *'the sustainability assurance scheme for soy by Lantmännen'* was chosen as unit of analysis.

3.2.3 Research Method

The research method explains the specific ways of collecting, analysing and interpreting data (Creswell, 2013).

- *Data collection*

Under a case study data collection used to be done under multiple sources (Ghauri & Grønhaug, 2005). It can be done in several ways as interviews, observations, and archives for example (Eisenhardt, 1989). In this occasion, a semi-structured individual interview and official documents and news were used for gathering the information within the case study. This selection of sources was mainly shaped by the research question, but researcher's preferences influenced the choice as well (Schutt, 2011).

A single individual interview was carried out within the case. This can be considered as a too small empirical dataset and, as a result, not consistent enough for making conclusions from research. However, as mentioned in previous paragraph, additional data collection methods were used for complementing the interview and create more trustful empirics. This data triangulation technique is explained in the following *Section 3.3*. Furthermore, one-to-one interactions, as individual interviews, bring the possibility of in-depth investigation of a person perspective and experience (Yin, 2003). Gustav Kämpe, member of the Sustainable Development department in Lantmännen and in charge of soy sustainability issues within the cooperative, was interviewed by telephone in two occasions: the 10th of April and the 22nd of May of 2015. The interview was semi-structured; meaning that questions could be added during the meeting and interviewer is free to comment what he considers (Robson, 2002). However, certain topics to be debated were decided in advance and a question list was developed for guiding the interviewer. Such a list can be found in *Appendix 3*. The just cited questionnaire was sent to the interviewee beforehand, together with the aim of the study, for getting his willingness to participate. Also, under his consent, the interview was recorded. The audio file was transcript afterwards for an easier analysis and contribution to credibility.

Official documents, as Lantmännen sustainability reports or RTRS standard guide, were accessed on their respective web sites and analysed thereafter. Also, news and different environmental groups reported facts were considered in order to provide another perspective to the problem. World Wildlife Fund (WWF), member of the RTRS, was probably the most used source for this purpose. Reports, website and blog entrances were analysed. WWF is an international non-profit organization working on environmental issues and with the objective of "*building a future in which people lives in harmony with nature"* (www, WWF-org).

- *Data analysis and interpretation*

Lincoln and Guba (1985, 241) stated that, before the qualitative study is finished, *"not very much can be said about data analysis"*. As mentioned, it is a flexible method that can be adapted by circumstances at each point.

Huberman & Miles (1994) list three main approaches to qualitative data analysis, interpretivism, social anthropology and collaborative social research, and the former is the one undertook in this occasion. Patton (2002, 114) termed this approach as hermeneutic perspective on texts and defined it as *"a perspective that views a text as an interpretation that can never be judge true or false"*. This approach states that it exists inevitable interpretation of meanings by the researcher; the authors state that, as a random reader, researcher has his own conceptions and is affected by a certain culture and historical time. As a result, practical understanding of others' actions can lead to different conclusions depending on the researcher background.

This interpretation of interviews and other documents, called narrative or discourse analysis (Schutt, 2011), is an intricate creation with a high degree of creativity. In order to make the collected information from the interview and archives more manageable the first step was reducing it (Huberman & Miles, 1994). This action keeps present along the rest of the research process and consists in selecting and/or summarizing the facts of interest.

Furthermore, coding these relevant concepts is the foundation of much qualitative analysis (Schutt, 2011). The creation of codes was based on several techniques: repetition of concepts along the interview, interviewee's emphasis and expressed importance, relevance of the topic in the literature and relation of the term with pertinent theories. Once the codes were created, clustering of themes was carried. Related topics were group in the following three categories: *Lantmännen RTRS support, Lantmännen triple bottom line* and *Lantmännen drivers for RTRS.*

Then, the data was display in a chart for having a broad and easier to understand picture, keeping the findings in text form can be tedious. The analysis of the data is presented in text form in the correspondent section and it is organized in under the three categories subtitles.

3.3 Credibility of the study

Despite they are gaining respect, qualitative studies are considered 'soft' (Guba & Lincoln, 1985). Their feasibility is often questioned so, asses their trustworthiness is appropriate. Their credibility relies on three pillars: the tools used for gathering the information and its analysis, the researcher himself and the philosophical belief in qualitative research (Patton, 1999). The three of them are treated in this section with the aim of providing plausibility to the findings.

For a credible collection of data triangulation of sources is used and, in order to support the analysis, interviewee corroboration and recording were followed. This kind of triangulation means that multiple data sources are considered (Knafl & Breitmayer, 1989; Patton, 1990; Stake & Savolainen, 1995; Patton, 1999; Yin, 2003). In this case, within the selected case study, different sources of material are exploited, for instance an interview or Lantmännen's archival documents. This way, crosschecking and authentication of evidence occur. On the other hand, interviewee corroboration consists in discuss data interpretation with participants afterwards in order to clarify the understanding of their answers during the interview (Lincoln

& Guba, 1985; Huberman & Miles, 1994; Cutcliffe & McKenna, 1999; Baxter & Jack, 2008). Interview transcript and interpretation was sent to Gustav Kämpe and his feedback was considered. Furthermore, record of the meeting was kept and transcript of the interview was done with the objective of ensuring fidelity and being reliable (Clegg, *et al.,* 2006).

In qualitative studies the researcher is the instrument so information about him/her is relevant (Stake & Savolainen, 1995; Pantton, 1999; Watt, 2007). What people see and interpret strongly depends on our interests, experiences and cultures among other factors. So, researcher can be bias and have selective perceptions depending on personality. Then, to contribute to analyst's reliability, it has to be highlighted that any personal attachment to the topic exists and previous contact with the case study has never happened. In addition, it is important to notice that the selection of topic, method and particular case study of this project was the researcher individual choice.

Last, the belief that qualitative method is the appropriate approach for the current research is key for defending its use (Watt, 2007). This justification can be found in *Section 3.2* and, due to this reason, not reiterated in the present one.

4 Background for the empirical study

The following chapter gives a brief introduction to the studied real case. By describing the focal company and the selected standard, justification of the choice based on the representativeness of the sample is done. In addition, context information is given for the reader to better understand this study.

4.1 Soy, Brazil

Lately, soybean production, and its attached wicked-problems, has cached a lot of attention among other agricultural products. With so many uses, soy has become a major global commodity (Meyer & Cederberg, 2013) and around two-thirds of it is traded (WWF-UK, 2011). For example, Europe consumes around 34 million tones of soy per year (www, WWF-UK). Most of the soy is used for animal feed in the meat and dairy industries (around 80 % according to WWF (2012) and for biofuels production (GM Watch *et al*., 2011). *Figure 5* shows the different products derived from soybeans. In the chart distinguishes different stages of the process of soybeans and makes evident the numerous application of the product.

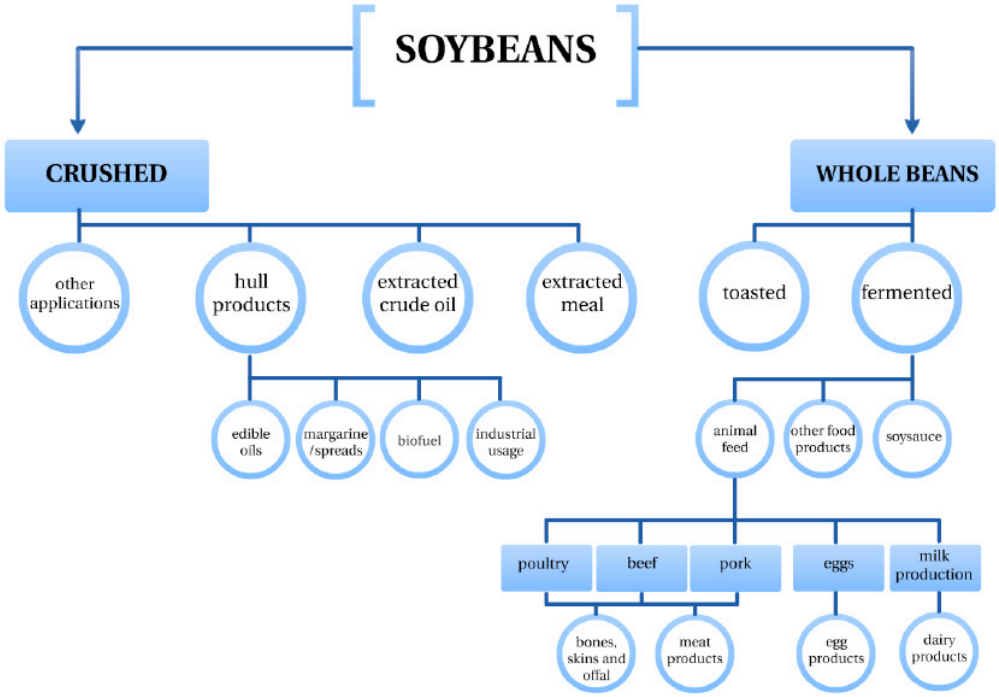

Figure 5. Products derived from soy (Own elaboration; adapted from www, WWF, 1)

WWF (2012, 4) considers that *"the soy boom in recent years has had a wide variety of environmental, social and economic consequences, both negative and positive, that go beyond the destruction of valuable habitats"*. Jaccoud and the Brazilian WWF division (2003) recognized the economic benefits of soy production but consider that the environmental and social impacts' future costs overcome the possible benefits. Also, several studies show that

the negative impacts from soy production has been magnified in last years (Fearnside, 2001) and gaining relevance worldwide. Then, critiques come from both Europe and the producing countries; soy issues are at international level and affect globally and they refer to different aspects of the TBL.

Environmental issues are probably the most popular. Soy production is classified as an unsustainable monoculture system, relying on a very small number of genetic variants, cultivars and planted over large areas for a large number of consecutive years (Meyer & Cederberg, 2013). Growing gains in productivity are very low at the moment and, therefore, the continuing increases in demand are more likely to be met by expansion in harvested area than by productivity improvement (WWF-UK, 2011). Also, zero tillage techniques are widely used due to soil erosion problems, and their application increased radically due to GM crops expansion (Bindraban *et al.*, 2009).

Besides, critiques exist about social aspects. For example, zero tillage systems, highly mechanised, need little workforce, boosting unemployment in rural areas (GM Watch *et al*., 2011). In addition, a gigantic amount of rural people is 'forced' to move to the cities. Already in 2006, a member of the Movimiento Agrario y Popular announced, "*the cultivation of soy takes 250,000 hectares every year which leads to the expulsion of 90,000 peasants"*. On top, he informed about the murder of around 30 rural farmers, between 2002 and 2006, while defending their land.

Brazil is the largest producer of soy in South America and the second of the entire world (WWF-UK, 2011). Despite USA is the major soy producer country in the world, the dramatic loss of natural habitats in South America, especially forests and savannahs, due to expanding soy production makes this area being in the spotlight. The sustainability discussion is focus mainly in Brazil due to the deforestation of the Amazon and the Cerrado biome. In *Figure 6* the area of the Cerrado Savannah that has been deforest for soy production can be seen. The left hand image shows the situation in 2002 and the right hand one is from year 2008; an increase in the deforested area of 4 % (WWF-UK, 2011) can be seen. Moreover, Brazil is today the country with most RTRS certified soy at farm level with 63 certified producers (www, Responsiblesoy, 3).

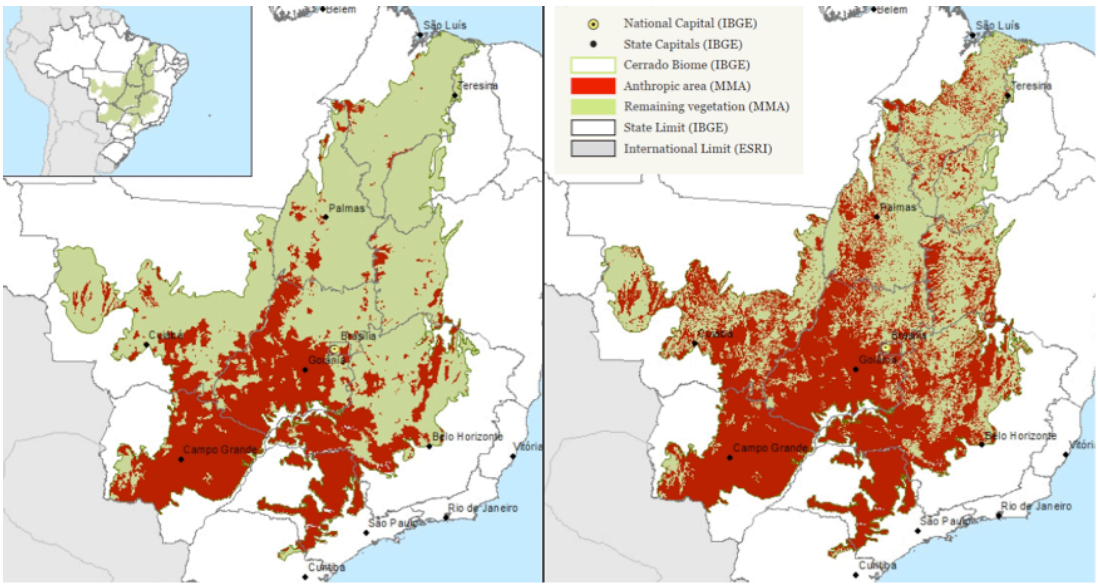

Figure 6. The Cerrado biome deforestation for soy production 2002-2008 (WWF-UK, 2011,18)

4.2 RTRS Standard

RTRS is, according to the classification of standards provided in *Section 2.2.1* a Sustainability Business to Business Private Standard for responsible soy production *"applicable on a worldwide level that assures soy production that is environmentally correct, socially appropriate and economically feasible"* (www, Responsiblesoy, 1).

In May 2004, in London, the original committee composed by Grupo Maggi, Cordaid, COOP, WWF, Fetrauf-Sul and Unilever initiated a forum (www, Responsiblesoy, 3). Two years after, in Switzerland, the first movements for RTRS standard were taken with the aim of develop a criteria and indicators for sustainable soy production (RTRS, 2008a). The first version of the standard was approved in 2010 (WWF, 2012) and at the moment includes:

- The **Standard** for responsible soy production
- The **Certification Standard** for prove that 3rd party evaluation has been made
- The **Chain-of-Custody Standard** for being able of answering to claims
- A **Certificate Trading Platform** for helping farmers that have not access to fully 'responsible' SCs
- A **Code of Conduct** for all members participating in RTRS
- A **Grievance Procedure** for ensuring transparency

There exist three different RTRS Chain-of-Custody models (i. e. ways of buying RTRS certified soy): through RTRS credits, Segregation model and Mass Balance model (Responsiblesoy, 2014). Charts about their flows can be found in *Appendix 1,* for an easy understanding, and a brief introduction to each of them is provided below.

1. *Through RTRS credits:* consists in grating to producers one credit per tone of certified soy. The physical flow of soy uses to be independent from the credit one. Within this method, there are two ways of setting the purchasing price, always determined by the market. The first one, 'Blind trade', allow the buyer to place a bid in the available platform waiting for a farmer to accept the price and conclude the transaction. On the contrary, under the 'Direct trade' system buyer and farmer agree in a price and quantity before making the transaction through RTRS platform. In both cases, RTRS does not participate in the payments.
2. *Segregation model:* conventional and certified soy are kept physically separated during the whole SC.
3. *Mass Balance model:* conventional and certified soy may be mixed.

Nowadays, from the three different systems, the total amount of RTRS certified soy is greater than 1,406,000 tones (www, Responsiblesoy, 2) and its production is concentrated in Brazil and Argentina. But, as showed in *Figure 7*, they are not the solely producers. Few certified producers exist in Paraguay, China, India and Canada.

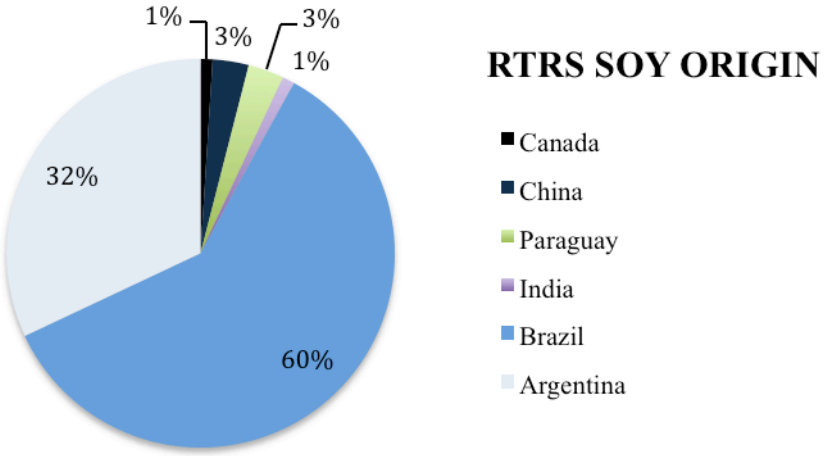

Figure 7. RTRS certified soy country of origin (Own elaboration; adapted from www, RTRS, 2015)

WWF supports RTRS and considers that it is the best available solution at the moment. However they do not see it as a panacea and they do not agree with all the viewpoints within RTRS (www, WWWF, 1). Indeed, a very important challenge for them is to boost non-GM soy consumption in the long term. They declared that:

"WWF does not believe the RTRS is the only way to mitigate the negative impacts of soy production, but we do believe it is an important part of the solution […]. *The roundtable provides a means for the market to contribute to a solution, but it does not replace other actors and strategies"* (WWF, 2012, 4).

4.3 Lantmännen, Sweden

The most populated Nordic country is known for having a high standard of living. Among other reasons, due to the high safety, quality and environmental standards they have (Business Insider, 2013). The Hofstede Cultural Dimensions theory, which studies how cultural characteristics of each country affect its members, considered Sweden as a 'feminine country'. In a feminine country dominant values are caring for others and quality of life (www, Geert-hofstede). Also, Swedish culture is known for the environmental concern; the mind stream in society and the business world is to take responsibility of both environmental and social impacts. The interest of society for the environment is highlighted by the Greendex report developed by National Geographic in collaboration with the GlobesScan. The index objective is to *"measure and monitor consumer progress toward environmentally sustainable consumption"* (www, National Geographic). In year 2014 Sweden was placed in the 12th position. Likewise, Campbell (2007) considers Swedish firms as good performers regarding ethical behaviour.

Soybean cultivation in Sweden is scarce so the country completely relies on imports. Most of the importers in the Swedish soy market are members of the Swedish Soy Dialogue. The Swedish Soy Dialogue is composed of 27 members, both companies and trade associations

(www, Lantmännen, 6). The main current aim is to reach a 100% of certified soy, by RTRS or ProTerra, consumption in Sweden. For the present year 2015 the objective was set at 60%. So, most of the importers and other players, as food retailers, try to comply with the standard and increase the amount of certified soy little by little. Among the members of the association we found Lantmännen; the major player in its home market, importing around 110.000 tones every year (www, Lantmännen, 5).

The chosen organization, Lantmännen, is rooted in Swedish farming. It is an agricultural cooperative owned by more than 33,000 farmers around the country, has about 8,500 employees, and is present in 20 countries. It operates throughout the chain, from grain purchasing, seed breeding and sales to farmers, to the further processing of grain and other raw materials into food and energy products. According to Lantmännen's webpage, the cooperative *"is active throughout the grain value chain from field to fork"*.

Their vision is to work with customers and suppliers to halve the impacts on the environment and natural resources. They also engage in active dialog with other participants in the value chain in order to drive development in a sustainable direction. As Lantmännen report on RTRS says, "*it is one of the companies who initiated the Swedish soy dialogue, which has encouraged several companies to take responsibility for their soy footprint"*.

The organization works to ensure that its sustainability efforts are always in full focus. This includes following up its suppliers to guarantee that they comply with Lantmännen's Supplier Code of Conduct (SCoC) and setting targets for sustainable purchases of soy. Due to this reason, more than 60 % of their soy imports, all coming from Brazil, were certified by RTRS standard in 2014 (www, Lantmännen, 7). The goal is to increase this percentage to 100% during the current year 2015 (*ibid.).* Parallel, *"Lantmännen sets requirements for GMO-free soy from all its soy suppliers; […] Lantmännen does no longer offer GMO soy to customers"* (www, Lantmännen, 3). Despite recognizing the positive effect of GMO in development of crops and techniques, they are aware of the potential risks involved and the non-acceptance by Swedish consumers (*ibid.*).

5 Results

This chapter compiles the findings obtained from the research. It focuses in the key results, the ones that are relevant for answering the research question, from the interview and the analysis of other documents. Coding and clustering the divers terms lead to five different sections: RTRS strengths, RTRS critiques, Lantmännen RTRS support, Lantmännen's sustainability and Lantmännen drivers for RTRS. Each of them is detailed below.

5.1 RTRS strengths

Due to the novelty of the standard, studies about its actual impacts were not found. As the first certificate was granted in 2011 (KPMG, 2013), insufficient information exists about RTRS effectiveness at the moment. According to the Corporate Europe Observatory (www, Corporate Europe) audits reveals that not benefit is achieved from RTRS standard. However, this source is not considered valid for lack of support and this thesis assumes that an evaluation of its implementation cannot be done yet (y Terán, 2011; KPMG, 2013). As a result, the real strengths of the scheme are difficult to identify and list.

Despite the impacts cannot yet been measured, from the moment the standard is seen as an achievement by some authors. For instance, Nepstad *et al.* (2006) confirm that thanks to the standard confronted stakeholders have start cooperating for the inclusion of environmental and social issues in their plans.

5.2 RTRS critiques

After the failure of the Basel Criteria for Responsible Soy Production (BCRSP), the NGO WWF proposed in 2005 the RTRS frame. The BCRSP was a voluntary tool that provides guidelines for acceptable soy production that could be applied by individual retailers or producers (Ismail *et al*., 2011). The criteria was created by ProForest together with WWF Switzerland in year 2004. In order to include mayor players of the soy industry in the stakeholder discussion, this initial approach was weakened considerably (www, Gmfreeze; GM Watch *et al*., 2011) leading to a polemic RTRS standard.

Despite SwedWatch (2012), a NGO reporting about environmental and social issues arising from Swedish business relations in undeveloped areas, considers that RTRS soy is better than non-certified beans. They defined the standard as *"not fully comprehensive"* (SwedWatch, 2012, 1) and believe that it should be more stringent. Other groups doubt about the truthfulness of the provided definition and consider that the term 'responsible' does not define the soy complying with the standard. An example is the '*Letter of Critical Opposition to the RTRS*', that can be found in *Appendix 2*, signed in 2009 by around 250 groups from all over the world. On top of that, RTRS soy lost credibility when two of the major players in Brazil, Aprosoja and Abiove, left the multi-stakeholder group in 2010.

Despite there are several certification schemes related to a more sustainable soy production, RTRS is the most popular and also the one receiving more attacks (CREM, 2011; GM Watch *et al*., 2011). In *Section 2.4* the most substantial critiques received by SB2BPS in general

were introduced, some of them are clearly present in RTRS standard and the main ones are listed below. These critiques make the standard effectiveness doubtful.

5.2.1 Weak contents

In the case of RTRS, the contents of the scheme are weak and, as key terms are not defined, the guidelines provided by the standards are subject to interpretation (y Terán, 2011, 6). By reading some of the 'rules' you can automatically classify them as advices; the imperative tone is missing. That way, companies protect themselves in case of failure and give room to adapt the standard to each particular situation.

As mentioned, RTRS contents are far from the ones under the initial BCRSP. Moreover, other certificates schemes, as Fair Trade or Organic, are way more severe and RTRS does not cover many of the issues addressed on them. For example crop rotation or banned pesticides are not included on the guidelines of the standard (www, Independentsciencenews). RTRS most relevant weaknesses recognized in the literature are: the acceptance of GM crops, the acceptance of deforestation and the inconsideration of land (and income) concentration and large-scale production**.**

- *GM soybeans allowance*

GM soy represents more than the 70 % of total produced soy in the world (WWF, 2012, 7). Due to this big proportion, allowing or not GM soybeans to be certified is a relevant decision. During RTRS creation, it was though that including it in the certificate would result in better outcomes. WWF believes, "*the RTRS cannot be effective in helping to prevent the environmental impacts of soy production, such as forest conversion, habitat loss, soil degradation, water use and pesticide use, unless it applies both to GM soy and GM-free soy"* (www, WWF, 2). However, the more rigorous BCRSP excluded GM soy (GM Watch *et al*., 2011). As it was mentioned in *Section 2.4* the SS content is less strict by time. More constricting norms, as the non-GM rule applied by BCRSP before, are not considered in the new RTRS. It has been found that GM soy is less sustainable than conventional soybeans; literature review about it is showed below.

The most extent GM soy is the one called Roundup Ready (RR), developed by Monsanto. There exists a documentary showing the collaboration of WWF with Monsanto for promoting GM RR through RTRS. The original name of the film, produced in Germany, was *'Der Pakt mit dem Panda'* (*'The silence of the Pandas'* in the English version). It was showed openly for first time in 2011; "*while indigenous peoples, environmental and human rights groups criticize WWF already for a long time, the film brought the problems with WWF also to the general public"* (www, Rainforest-rescue).

It has not been found that yields of GM RR and conventional soy differ (Bindraban *et al.*, 2009). However, in terms of sustainability many are the commented divergences (GM Watch *et al*., 2011). GM RR was designed to tolerate the herbicide Roundup whose main component is glyphosate. This substance cause weed resistance, the most serious problem faced by farmers cultivating GM RR soy (Antoniou *et al.,* 2010; Benbrook, 2012). Many studies, as the one presented in year 2008 by Vila-Aiub *et al.,* show that the use of Roundup herbicide, with high content in glyphosate, makes glyphosate-resistant weeds to invade the land. Over time,

no quantity of glyphosate is enough and farmers are forced to use even more toxic herbicides (*ibid.)*

Hence, nowadays, it has been found that RR soy has higher herbicide impact (Bindraban *et al.*, 2009). A study published in 2012 by Benbrook, PhD researcher from Washington State University, found that, rather than drop herbicide use like Monsanto originally claimed, herbicide-tolerant cropping systems increased herbicide use. During the period 1996-2011 herbicide usage raised by 404 million pounds and it is estimated that, on average, every year the increase in pesticide use is of 25%. Even Monsanto itself has recognized its failure lately.

One of the explanations for this high level of pesticides is that GM RR soy has facilitated the expansion of zero tillage practices. The mentioned methods have a lot of benefits as erosion control, better water balance, increase of soil biodiversity or savings in inputs (Teasdale *et al.,* 2011). But negative consequences also exist; the main one is that "*mechanical weed control is often replaced by chemical control"* (Bindraban *et al.*, 2009, 16). So, despite saving inputs and machinery and labour among other factors, these approaches require more herbicides. Nevertheless, ordinary soy production also uses small amounts of glyphosate, mainly as a pre-emergence herbicide due to zero tillage methods used (*ibid.*).

In addition, the cultivation of GM RR soy requires more energy than the conventional one, according to the data presented in Bindraban *et al.* (2009). Furthermore, the soil used previously for GM RR is damaged and cannot be used for the production of other crops (GM Watch *et al*., 2011). But, GM soy debates are not only focused in its environmental consequences but also in *"intellectual property rights, the power relationships between farmers and private companies that supply seeds, health risks, etcetera"* (Bindraban *et al.*, 2009, 4).

Some healthy possible outcomes from herbicide exposure have been identified, even not much research has been found in this area. Glyphosate used in GM RR production, is spread from airplanes and giant tractors making the herbicide drift close to population of the area (GM Watch *et al*., 2011). One study demonstrated that Roundup herbicide causes birth defects in frogs and embryos even if they are exposed to lower levels of herbicide used for GM RR production (Pagnelli *et al.,* 2010). Also, Benachour & Séralini (2009) verified that its high content in glyphosate could provoke necrosis in human cells. Furthermore, in an interview carried on by Sveriges Radio in February of 2010 to Wanderley Pignati, professor at the University of Cuiaba and specialist on health effects caused by pesticides in Brazil, he announced that many people died yearly in Brazil due to pesticide intoxication. And the numbers seem to be even worse than it is communicated because *"for every case recorded there are 50 not recorded"* (pers. Com., Pignati, 2010).

It is also relevant to mention that, in comparison with other pesticides, glyphosate risks are limited and it has been proved that its application in GM RR soy can have a positive impact on plant diseases, avoiding in that way the use of fungicides (Bindraban *et al.*, 2009). Still, other pesticides usage overcomes this positive impact, leading to consider GM RR as a less sustainable alternative in this aspect (ibid.).

In short, RTRS "certifies soybeans grown in large-scale chemical-intensive monocultures. They are usually GMOs" (www, Independentsciencenews). So, the soy produced under the standard seems to be far from being 'responsible'.

- *Deforestation allowance*

The increase in soy applications made other crops' production to decrease and expand the hectares of existing arable land at the expenses of natural areas. On the contrary to the BCRSP, the guidelines of this standard allow deforestation of valuable ecosystems, as the Amazon for example, if the land is marked for agricultural use (Responsiblesoy, 2014). Once more, the watering down of the standard can be seen.

According to the point number 4 of the standard, related to deforestation, it can be concluded that the standard allow soy expansion even at expenses of deforestation or destruction of other habitats in many occasions. The circumstances under which a piece of land is considered adequate for soy cultivation are lame and very easy to defraud (GM Watch *et al*., 2011). Furthermore, pastures where occupied by soy so new natural areas are convert into pastures to counterbalance (Bindraban *et al.*, 2009). This lead to losses in biodiversity and to an increase in green house gasses (*ibid*.). However, in the case of GM RR soy expansion in degraded pastures lands is appropriate due to the capacity of those beans to control weeds (*ibid.*).

- *Land (and income) concentration and large-scale production inconsideration*

Land concentration and size are issues that have not been mentioned in RTRS guidelines at the moment. Land and, as a result, income concentration phenomenon is very important in Brazil. Soy land size has rapidly changed from 500ha to 10,000ha (y Terán, 2011, 6), provoking a marginalization of small farmers, who are not competitive in front of the massive producers. For instance, a report by the consultancy KPMG (2013, 5) informs, "*the best-prepared large producers can recoup their investment within one year while less-prepared medium-sized producers may achieve return on investment in less than five years"* making the situation even more favorable for big producers.

Also, amplification of the size of soy fields provokes loss of biodiversity and reduces employment on farms (Bindraban *et al.*, 2009). However, positive characteristics, as more economically efficient systems or creation of supplemental activities, appear as a consequence of this size enlargement as well (*ibid.*).

5.2.2 Lack of democracy

Lack of democracy is a common critique within standards and it appears in many ways. In the roundtable, diverse groups with different opinions exist; sometimes even with incompatible definitions of sustainable soy. It has to be taken into account that defining sustainable soy is highly complex; different countries have divergent values, priorities and perceptions regarding sustainability (Bindraban et al., 2009). In addition, according to Hospes et al. 2012, RTRS increased rivalry among partners and negatively affected the production of more responsible soy.

WWF weakened the initial BCRSP approach in order to work with instead of against other player in the soy industry. They defend themselves saying, "*developing standards with other stakeholders, we can have a far greater impact than by refusing to participate"* (www, WWF, 2). But, why did they choose the most powerful players in the soy SC to collaborate with instead of jointly act with small producers and already success standards as Fair Trade or

Organic? In the RTRS webpage database all members belonging to the group can be checked. Among them there are powerful companies from the food and agricultural sectors, most of them with a poor environmental record, as Monsanto, Syngenta, Cargill, Nestlé or Unilever. Major oil and gas companies, as BP International and Shell International, and prominent NGOs, as WWF or Fauna and Flora International, take part in the dialogue.

Nonetheless, amidst the affiliates, producers are not represented: *"not one South American small farmers' or indigenous peoples' organization is a member of the RTRS"* (www, ASEED, 1). As identified before in the literature review chapter, small and undeveloped countries farmers are the most discriminated groups. This can lead to the total control of the soy trade market by multinationals and Daviron & Vagneron (2011, 108) consider, *"big roundtables as RSPO, RTRS or BSI need a better representation of governments and producer organizations"*. Schouten *et al.* (2012), contradict that RTRs is open to all stakeholders in practical terms.

One example of this marginalisation could be seen during the 3rd RTRS in Argentina in 2008 and recounted by the popular information platform 'Soy Kills' (www, Lasojamata). Civil society and small farmers try to assist to the event, celebrated in Hilton Hotel, with the aim of showing their positions and participate in the Q&A space that theoretically existed. However, their entrance was denied and they were never listened.

5.2.3 Misleading certification

Professional certifiers checking the compliance with the standards code are members of RTRS (www, Independentsciencenews). Due to this reason, auditors' independence is questionable. Furthermore, in the case someone is not complying, sanctions are not defined (*ibid.*). The only identified statement related to sanctions is the following: "*If members do not comply, membership can be withdrawn"* (WWF, 2012).

In addition, as explained in the *'Guide for RTRS material Trading'* published by RTRS (2014), the standard allows the mix of RTRS-certified soy with non-certified soy by using the Mass Balance model. According to Bindraban *et al.* (2009), it is not possible to strictly keep apart conventional and GM RR soy; mingling of both kinds of crops use to occur after harvesting. In the EU products containing more than 0.9% of GM components must be labelled according to it. Still, Lathman (www, Independentsciencenews) concludes that the whole mix is labelled with RTRS logo even it is not true. However, Mass Balance is not the only available mechanism offer by the standard, as it was showed in *Section 4. 2.*

5.2.4 Green washing and quality of implementation

Schouten *et al.* (2012) mention the possibility of RTRS been used for green washing; ASEED (2008) states that some companies have been using RTRS standard for improving their image. The consistency between these companies' message and their actions is vague; they are clear cases of green washing. So it can be said that its quality of implementation is 'symbolic' and complying with the standard objectives is not considered as important as advertising and marketing the implementation of the SB2BPS.

5.2.5 Privatization of traditionally public norms

RTRS stops governments from creating real regulations (ASEED, 2008); corporations set their own private policies according to their preferences. Standards cover official law gaps making governments being apart of the issue in question (Henson & Caswell, 1999; Schouten *et al.,* 2012). RTRS performs alone, not conjoint action with governments has been found, meaning that the standard is the rule that prevails when talking about 'responsible' soy at international level.

5.3 Lantmännen RTRS support

Lantmännen has chosen RTRS standard among others, mainly, due to its openness. The representative of Lantmännen cooperative participating in this research interview, Gustav Kämpe, defended that RTRS system is more open for everyone to take part in. He said that farmers, producers and the feeding industry, among others, can easily participate in the standard. Moreover, he defended RTRS because it allows the certification of GM soy as 'responsible' while other available standards, ProTerra for example, do not. However, after manifesting their clear preference for RTRS, he added, *"it is not that important which one you choose, it is more important that you take some responsibility"* (pers. Com., Kämpe, 00:11:15). He tried to give more importance to the practical response by companies regarding soy issues than to the picked standard.

Even though in 2010 two main important players in the Brazil soy market, Aprosoja and Abiove, left the standard, Mr Kämpe assured that Lantmännen cooperative did not consider at all the possibility of joining them and abandon RTRS. Instead, they considered they should go ahead, take responsibility and say, *"we want this type of soy"* (pers. Com., Kämpe, 00:16:19).

Also, despite the strong critiques about RTRS allowing GM soy to be certified, Lantmännen agrees with the standard position. Mr Kämpe followed the same explanation than WWF: as the percentage of GM soy is so big, not including it in the standard would have a really small effect. They consider that in that case RTRS would be such a small player that would not contribute to solving the actual non-sustainable soy production. He remarked, "*the aim of the standard is to change the total soy production and not just a percentage of it"* (pers. Com., Kämpe, 00:33:23).

Lantmännen RTRS support is also seen in its effort for influencing other participants in the chain. In its webpage several quotes as*"we also engage in active dialog with other participants in the value chain in order to drive development in a sustainable direction"* are repeated. For example, they notify that they take an active position in widening awareness about health, food and the environment to consumers. The interviewee gave some evidence about their attempts to boost RTRS use. He told that the cooperative has been investing money in supporting farmers in the acquisition of the standard. Also, he mentioned they were one of the speakers in the last celebrated RT where they presented the Swedish Soy Dialogue and the work that they have done to inspire other companies. Claes Johansson, head of Lantmännen's sustainability department, made clear that the objective is to increase the volume of RTRS-certificated soy production:

> *"Sweden is still less than 0.5% of Brazilian soy production. An isolated Swedish approach has very limited effect but if we commit and work through leading international initiatives, we can really make a difference and show an example that may contribute to the development in a larger context"* (RTRS Conference, 2012).

When asking about public regulation in the field, the interview respondent showed limited understanding. He highlighted the importance of public rules and its compliance at a basic level but not in terms of sustainability. But he stated that the voluntary nature of RTRS make it compatible with the market. He explained that, if RTRS would become mandatory, many companies would move to the soy market in other places as Argentina. Consequently, the PS RTRS is seen as a realistic step to sustainable soy according to Lantmännen. They do not consider than public intervention is needed and highlight the difficulty and high cost of controlling all the producers' compliance.

So, Mr Kämpe sees RTRS as a win-win situation for all players in the SC of soy and recognizes the standard as a good starting point. He thinks that the achievement of a sustainable soy production is far but that the standard is a good beginning. Nowadays, he revealed that RTRS certified soy can be qualified as 'responsible' but anyhow as 'sustainable'. Both concepts are sometimes used interchangeable in literature and do not posses a concise definition. Because of that, Lantmännen's interpretation was asked to Mr Kämpe. By 'responsible' labelled soy the cooperative means that it is more sustainable in comparison with conventional one. He clarified that conventional soy could be responsible too but you will never know up to what point without the standard presence. The term 'sustainable' soy is for them more stringent; it refers to soy that has not negative effects on the environment, society and economic aspects.

He admitted that further betterments could, of course, be made but not special drawbacks were mentioned. In several occasions he drew attention to the importance of starting by increasing the amount of certificated soy before further develop of the standard. He remarked that RTRS has been improving since it born. Complementarily to the standard, Lantmännen follows up its suppliers to ensure that they comply with its SCoC and sets targets for sustainable purchases of soy, according to their webpage.

5.4 Lantmännen's sustainability awareness

Sustainability is present in Lantmännen's webpage and mentioned in several occasions during the interview. Mr Kämpe made reference, not always simultaneously, to the three pillars of the TBL: economic, environmental and social. He declared that the three components of the TBL enjoy the same importance in Lantmännen. But, in practice, doubts exist about the equal treatment among them.

- *Economical aspects*

Mr Kämpe talked about the initial steps of acquiring RTRS; aware of the problems in soy production, Lantmännen started looking for a feasible and cost efficient solution. The final decision was discussed exclusively between the management board and financial department, not other members in the cooperative where included in the discussion. Creating and applying an own standard was contemplated and considered as a good idea by the interviewee; he

sustains the fact that you can include all aspects you consider relevant and make a system according to your characteristics. But, in agreement with him, it would be definitely not realistic. Lantmännen is a small player, in the international soy market, for carrying a standard itself due to the cost. Likewise, Mr Johannson mentioned, *"an isolated Swedish approach has limited effect"* (pers. Com., Johannson, RTRS conference, 2012).

Some potential drawbacks of the standard treated in the interview where responded with a financial argumentation. For example, Mr Kämpe was asked about farming practices, which would reduce pesticide use in soy production, not considered by the standard. One of them was crop rotation; he accentuated the fact that the other crops present in system must be profitable for the producer. Thus, the earnings per crop will decide about crop rotation; nobody will combine soy with a grain for which there is no market or profits are low. Another example, the Mass Balance method, explained before in *Section 5.2.3*, was commented. Mr Kämpe defended this technique as it decreases logistic costs and he assures that the Segregated model would not contribute more to sustainability. The amount of certified soy is the same if it is mixed with conventional one or if it is kept separately. But, at the same time, it is difficult to control de true amount of RTRS in that mix. However, the company consumes certified soy using RTRS credits system.

When Mr Johansson was interviewed in Sveriges Radio (www, Sverigesradio) he was asked about the use of pesticides. Similarly, he answered with an economical based reasoning when asking why Lantmännen does not demand a non-use of the most dangerous pesticides: *"it would of course affect the cost of soy significantly. I cannot say how much*".

During the interview it was also underlined that RTRS standards works very good with the market, as it is voluntary. Mr Kämpe stated that, in case of being mandatory it would not be economically sustainable for some companies and they would move production to somewhere else. Thus, only the companies that are able to afford for applying the standard do so, keeping a stable situation in terms of costs. This economic issue was reconsidered recently; Mr Kämpe remarked that the fee system was reformed for keeping from failing RTRS applicants, especially small ones. Nowadays, each producer pays a fee that corresponds to the amount of certified soy produced and, in exchange, certified grain is paid better, so RTRS soy producers are somehow supported financially. However, a minimum volume of total production and certified production are needed, he said.

The economic effort the group does for consuming RTRS certified soy is not much. Duncan Williamson, WWF UK's Food Policy Manager, defines the additional costs for RTRS certified soy as 'negligible' (www, WWW-UK). Lantmännen buys RTRS credits at 3 USD each, price agreed with its suppliers. This means that for each tone of certified soybean they pay a surplus of 3 USD above the price for a conventional tone of soy. So, taking as example data from May 2015 (www, Indexmundi), if the price of conventional soy is 352 USD the price of RTRS certified soy would be 355 USD. This means that, in this case, certified soy is just 0,85 % more expensive. This 3 USD surplus paid to certified producers, does not vary in proportion with the price of the grain. They receive this constant quantity directly and it is spent in covering certification expenses.

- *Environmental and social aspects*

During the whole interview, the awareness about the soy production environmental and social issues was shown. The interviewee made clear that Lantmännen knows about the existing problems in the soy business and has been trying to take responsibility since almost ten years ago. They identified this awareness as the main driver for applying RTRS standard and they have been actively participating in the mentioned standard from the very beginning; since the first roundtables that create the pillars for the standard in 2005 (pers. Com., Johannson, RTRS conference, 2012).

Likewise, they do not only take responsibility by using RTRS standard. Diverse practices are taken in different areas of the cooperative and not solely regarding soy production. In numerous texts of Lantmännen webpage phrases as *"Lantmännen is active in all the parts of the value chain, from farmland to table"* (www, Lantmännen, 1). Or *"Lantmännen has an opportunity and responsibility to contribute to more sustainable grain production in every part of the value chain"* (www, Lantmännen, 2).

Despite the social aspects where clearly the less mentioned by the interviewee, when checking their SCoC it was found that greater attention is paid to them. They include guidelines about freedom of association, working hours, wages, forced labour, child labour, discrimination and oppression and working environment and safety. Furthermore, Mr Kämpe declared that environmental and social aspects receive the same degree of attention. But, due to an interviewee's last comment it seems that the environment is more relevant for the group. It would make sense for him the greater presence of the environmental issues; "*we have to consider that we are in the agricultural business so we have better knowledge about the environmental questions"* (pers. Com., Kämpe, 00:42:00).

Regarding the environment, Gustav Kämpe mentioned some examples. The most salient one is probably the control in energy use; they attempt to reduce the consumption on energy and increasing the ratio of renewable sources. Also, waste reduction is placed in the first positions of the organization's dues. In addition, he almost forgot to tell that they use the standard for organic and in their SCoC they explicitly mentioned, *"the supplier shall comply with national laws and the principles in the [UN's] Global Compact concerning the environment"* (Lantmännen, 2008, 1).

In the little time dedicated to social aspects, Gustav Kämpe intensely exposed the attention and consideration that supplier farmers enjoy in the cooperative. Lantmännen sees a benefit from it because "*the farmers know their land best"*(pers. Com., Kämpe, 00:26:26). The care for human capital was shown in the interview principally when talking about the soy SC. He told that the cooperative keeps a tight relationship with its Brazilian suppliers. Also, they support them in the application of RTRS standard by buying their certified production prior the conventional one and investing in educative programs for the farmers.

However, before listing the above examples about Lantmännen's responsible practices, Mr Kämpe recognized that they *"could do it a bit better"* (pers. Com., Kämpe, 00:50:14) and closed the interview saying that it is always possible to do something else.

5.5 Lantmännen drivers for RTRS

Mr Kämpe made clear what were the main drivers for Lantmännen to require RTRS standard to suppliers. Apart from the already mentioned awareness about conventional soy production issues and sense of responsibility, he mentioned two other drivers: risk management and reputation. Nonetheless, NGOs pressure was also cited.

Mr Kämpe related that, when the application of the standard was discussed in first stage, Lantmännen leaders concluded it would be worthy to use it because of two reasons: the probability that it would contribute to a more responsible soy and the internal interest of decreasing risks. Also, risk management is identified as the main benefit Lantmännen takes from the standard and reputation was quoted with a tone of obviousness. Later in the interview, he indicated that mainly risk management and reputation are the most salient benefits from RTRS. Both were transparently repeated several times along the interview and he referred to them in a direct way and always correlated.

RTRS is used as a risk management tool because they are concern about the various obstacles, for the environment and society, soy in Brazil has, informed Mr Kämpe. By using the standard they want to ensure that final products' image is not damaged. According to the interviewee, this means that they use it for not only gaining reputation but for maintaining the already achieved prestige. Keeping a good image of the brand is even harder than attaining it and demand would depend completely on it. So RTRS is used as a long term guarantee for this purpose.

NGOs collaboration also directed the cooperative towards RTRS standard. Mr Kämpe commented that a discussion with WWF and SwedWatch, together with some reports by both of them, encouraged Lantmännen and affected the final decision.

However, four potential drivers were not recognized as such during the interview: pressure from Swedish farmers, food safety, product differentiation and traceability. Swedish farmers that consume soy for feeding the cattle were not persuading Lantmännen for importing certified grain; Mr Kämpe assured that the pressure was at least not too tight. Regarding food safety, he said they work hard with other programs for taking care of it together with the Brazilian producers. Also, differentiation for products was declared as *"not a special benefit for us"* (pers. Com., Kämpe, 00:36:16). Last, traceability was not recognized as an advantage due to the fact that they are always importing soy from the same few Brazilian producers. Meaning that they are familiar with the process and trust between them exists.

Furthermore, Mr Kämpe asserted that most of his colleagues in the Swedish Soy Dialogue are actually worried about the damages to the rainforest in Brazil and other issues around soy production. He highlighted that within the members of the Swedish Soy Dialogue decreasing risk along the SCs is fundamental as well. He assured that the certificate does not seem to be used as a marketing tool among them and that it is drove by awareness and risk management primarily.

6 Analysis and discussion

This chapter aims to explore the significance of the findings and addressing the research questions stated in Chapter 1, based on the theoretical framework and the empirical data. So, it is a review of the findings in the context of literature and the existing knowledge about the subject. The objective is to tell the reader what the results might signify and highlight their theoretical importance and value. A summary can be found in table form at the end of the chapter.

Today, all industries apply standards and certificates and several options exist even for the same product. This is the case of soybeans, for which several standards exist. Mr Kämpe considers that, despite not being the only 'responsible' soy, is one of the few that you can identify as so. Lantmännen, being a Swedish cooperative, is expected to follow the country mean stream and to choose such standard looking for a more sustainable soy production.

However, RTRS standard, as SB2BPS in general, has received a lot of critiques and doubts exists about the responsible character of the soy under its certificate. This study has listed, in previous section, evidence of the particular negative opinions about it. So now, it is attempted to clarify the reason why the cooperative make use of such program. The analysis starts by the studying the questionable sustainability awareness, as a driver, mentioned in first place by Mr Kämpe. Thereafter, and in agreement with Stakeholder theory, both internal and external stakeholders influencing the decision receive attention through the analysis of the conceptual framework presented in *Section 2.5.2*. Some of the suggested potential listed drivers were automatically identified by the interviewee and supported or doubted by our analysis. Nonetheless, further implicit drivers were identified by studying the data. Also, the drivers that are not considered to influence RTRS acquisition, recalled by the interviewee or identified by researcher, are commented. The chapter concludes with *Table 3*, that illustrates which drivers and which not are thought to make Lantmännen acquire RTRS.

6.1 Sustainability awareness as a driver for RTRS

Sustainability awareness was mentioned by Mr Kämpe even before start talking about RTRS drivers and identified in numerous occasions during the whole interview. In our results, the awaited concern about environmental and social issues of the organization in general and particularly about soy production can be seen. According to literature, awareness is classified as an internal personal normative incentive (Egri & Herman, 2000; Steering Committee, 2012) and as an influence from authorises as the decision of acquiring the standard was taken by the board of directors following solely their criteria. These personal norms are highly dependent on education and culture and, it is not surprising that the managers have such values considering the country context. The truth of sustainability as main driver for RTRS implementation by Lantmännen is discussed thereafter.

Several facts reinforce this assumption that Lantmännen is drove by a real concern. For example, they were present in the soy dialogue from the beginning, before the standard was even created. Mr Kämpe highlighted the importance of taking responsibility in soy production in front of the importance of the chosen certificate making. Also, they agree with the fact that RTRS is not perfect and could be improved once it becomes more popular. Furthermore,

referring to the cooperative as a whole, he admits that much more can be done. So, they see beyond present actions and are willing to continue meliorating; Mr Kämpe does not seem completely satisfied with the current performance. Apart from initiatives in soy, several examples of other sustainable attempts the cooperative carries were cited during the interviewee and communicate in its webpage. There is evidence that the environmental and social concerns are present not only in different products but also in various activities as we seen in the data about Lantmännen's sustainability. Furthermore, they complement RTRS with a SCoC for ensure the desired performance of its suppliers regarding environmental and social aspects.

However, many are the signs for doubting about sustainability awareness as main driver for RTRS utilization. On the one hand, the interviewee support of RTRS standard was evident and perceived as too extreme in some occasions. For example, it was expected that after Aprosoja and Abiove left the standard, taking into account the importance of the gone entities in soy SC, Lantmännen would have questioned the effectiveness of the standard. On the contrary, they continue trusting the scheme frantically; any attention was paid to the reasons why the two groups abandoned RTRS. Likewise, all opinions about RTRS critics were answer with a clear position of support and defence of the scheme. For instance, GM crops are completely accepted despite the extensive studies and different testimonies about their drawbacks regarding environmental and social issues. While the NGO WWF sees GM soy as a problem to be solved in the future, Lantmännen does not even consider it. Mr Kämpe justified the choice of RTRS among others similar standards based on: the standard openness first and GMO allowance secondly. But that openness has been proof to be limited; no farmer is participating in the roundtable for example. Therefore, it seems the cooperative is choosing RTRS for being the only one willing to certify GM soy as 'responsible'. However, Lantmännen is, in theory, not consuming GM soy at all due to its potential risks. Then, Lantmännen's sustainability concern seems to go beyond the "sustainability" levels set by the standard.

This fact was in a way corroborated by Mr Kämpe when he differentiated between 'responsible' and 'sustainable' soy. RTRS certified soy is declared as 'responsible' and far away to be 'sustainable'. This means that the RTRS soy is in theory less harmful than conventional. However, its production still has a lot of drawbacks and sometimes it is not notably different than conventional one. So, the standard outcomes are too weak for consider them a big achievement in terms of sustainability. It does not seem that the standard is enough to respond to Lantmännen's awareness and cover the responsibility in environmental, social and economic aspects.

At any moment they have checked by themselves RTRS efficiency. On top of that, the cooperative considers the voluntary standard as a better tool towards a more sustainable soy production than an equivalent private regulation. Keeping apart governments make a lot of players in the soy SC to not take their due responsibility. So, sustainability of soy production depends completely in voluntary decisions, often not run by environmental and social concerns. This unconditional fidelity to the scheme could mean that they are blindly taking for granted RTRS competence; a critical view of the standard is apparently missing.

On the other hand, the economic pillar of the TBL seemed to weight more than the remaining two, especially than the environmental. Drawbacks of the standard as the non-boost of crop rotation, the use of the Mass Balance system or the allowance of specific pesticides were justified with an economic reasoning meaning that the cooperative pays more attention to the

profitability of the practices than to the environmental impact. Despite social aspects did not receive a lot of attention, they do not seem to be sacrificed for greater earnings.

6.2 Internal drivers for RTRS

- *Organizational advantage*

There is no evidence that the standard is taken with an organizational advantage purpose. First of all, Lantmännen is not acquiring RTRS for learning; they were aware and well inform about soy production problems before the standard acquisition. It is true that, for example, they can benefit from WWF and SwedWatch reports but it is definitely not a relevant reason towards RTRS; they have their own research about the topic so the costs do not seem to be a barrier for learning within the cooperative. Also, the human capital consciousness is supposed to already exist due to Swedish culture. Using RTRS as benchmarking for proper performance in environmental and social terms is clearly not of important interest for Lantmännen; they complement RTRS with its SCoC and other programs, for example for food security, so RTRS does not define the limits itself. Last, improvement in organizational relationships was not directly related with the engagement in RTRS certificate. On the contrary, other initiatives as participating in the Swedish Soy Dialogue, were declared as clear vehicles to the expansion and betterment of relations.

- *Supplier pressure*

Soybeans are present in numerous food product chains as meat, eggs or diary products so, food safety is an essential issue for Lantmännen, said Mr Kämpe. It could be considered as an internal driver for RTRS acquisition; a supplier pressure to guarantee the security of the supply. However, for ensuring food safety RTRS is not appreciated as enough by the cooperative and they have other specific programs focused on it.

Also, in several occasions Mr Kämpe based his answer in the small size of Lantmännen in comparison to other players in the international soy market. One example is when talking about logistics and traceability, not considered very relevant for the company due to the simplicity of the SC. Controlling few suppliers with whom you maintain a close, and long term, relationship is not complicated for the cooperative. So RTRS does not contribute much to managing logistics and to picture the process through which the soy passed. Controlling their real behaviour of the business partners group of suppliers can be a pressure likely to exist in occasions of a bigger and/or more complicate chain. Then, logistics and traceability could be considered as internal drivers for applying the standard with such characteristics, but not in this case. Equal argumentation is followed by supply-side efficiency and costs drivers: the limited dimension of the firm together with the simplicity of the soy SC make these drivers not being significant.

- *Normative incentives*

Personal norms determine the attitude of managers towards sustainability and affect the level of responsibility exhibited by the company. As mentioned when talking about sustainability awareness, there is not doubt the cooperative board is concern about sustainability issues. However, it is not clear how much weight played in the decision of acquiring the standard. Social and industry norms possibly affect but are not considered decisive.

6.3 External drivers for RTRS

- *Buyer pressure*

Most of the soybeans arrive to the final consumer after several processing steps as showed in *Figure 5* so Lantmännen B2C relationships are inexistent for this crop. Swedish farmers are the main consumers of the imported soy by Lantmännen and they were not pushing the cooperative towards engagement RTRS. Accordingly, this external driver classified as pressure from B2B consumers does not meet. It can be presumed that Swedish framers to have the same personal norms as Lantmännen's board of directors and require RTRS certificate in their purchases. However, it has to be taken into account that the cost of certified soy in slightly greater than the one for conventional one. This can affect the customer group willingness to demanded it and, as a result, their pressure to Lantmännen to employ the certificate.

- *Market pressures*

Taking into account that Lantmännen enjoys around 60 % of soy market share, differentiating the product may not mean a lot for them. Mr Kämpe did not recognize it as an influencing factor for using RTRS. This, together with the Mass Balance method they follow makes clear evidence that the certificate is not used for marketing purposes. They think it is important to consume certified soy but differentiating it from the conventional does not seem that relevant. Thus, Lantmännen does not suffer the external market pressure of differentiating its soy in front of customer groups or business partners as distributors.

Despite it is not expected RTRS to be exactly used as a market tool for attracting new consumers in the current market or in new ones, it could be used for maintaining the market share they already enjoy. Mr Kämpe emphasised the importance of maintaining reputation in front of gaining it and market share goes together with the brand image. This market share maintenance objective is an external driver for RTRS acquisition, a market pressure by customers.

Moreover, when talking about risk management, Mr Kämpe refered to the reputational risk management highlighted as a significant driver of environmental change by Waldman and Kerr (2014). Reputation is classified as an external driver; a market pressure from customer groups and external influencers as community members. There is not doubt that Läntmannen is using the standard as a tool for managing this risk and it is recognized as the main benefit from RTRS. Moreover, the interviewee considered the driver as 'obvious'. However, it seems

they take care about reputation as a prevention measure but not as a marketing tool. They have the appearance of want to have a backing for reputation in case of unpredicted events occur rather than increase market share due to reputation gaining.

- *Society pressures*

With less impetus, WWF and Swedwatch NGOs are considered to be one of the stakeholders that pushed Lantmännen to RTRS acquisition by Mr Kämpe. They are classified as an external driver, a society pressure. In this case we are in front a NGO engagement example; NGOs and Lantmännen cooperate and work together for mutual benefit. For instance, reports about soy production issues developed by WWF and SwedWatch were facilitated to the cooperative with the aim of influencing their decision. Also, collaboration with NGOs can affect positively Lantmännen's reputation and brand image, very important aspects to maintain.

- *Regulatory pressure*

In the interview, clear preference for the voluntary character of RTRS in front of public regulation was showed. Mr Kämpe defends stopping governments to create mandatory rules in the field. So it can be conclude that the standard is use as a tool for pre-empting public regulation. However, possible higher cost and more stringent rules attached to public schemes are not catching the attention of the interviewee. He based his arguments in the unfeasibility of obliging all farmers to follow a scheme.

In that case, pre-emption of regulation would be consider as external driver, a regulatory pressure from authorisers. Also, it has been concluded that RTRS is used as a prevention tool so it would be reasonable to deduce that it is used for decreasing the tort liability. Despite, the legal requirements about soy sustainability are not salient, it can help to comply with the general legislation. On the contrary, regulatory consistency and barriers to entry are clearly not affecting decisions about RTRS standard. On the one hand, Brazilian public regulations about sustainability in soy production are inexistent. On the other hand, the cooperative enjoys already a 60 % of market share and seems they do not need help to maintain that position. Despite being a small company in an international context, Lantmännen is a big player in the Swedish scenario. The group is the only cooperative in the market and they are clearly supported and enjoy a good reputation among society.

- *Investors pressures*

Due to cooperative nature of Lantmännen its investors are the members of the group, i.e. the farmers. The pressure from them is obviously inexistent in this case; Mr Kämpe mentioned that they were not consulted about RTRS acquisition and. The same way, the members did not seem to be pushing the cooperative board for doing so.

Table 3. Summary of internal and external drivers for Lantmännen engagement in RTRS (Own elaboration)

INTERNAL DRIVERS	ORGANIZATIONAL ADVANTAGE	*Company learning*	X
		Human capital	X
		Benchmark	X
		Organizational relationships	X
	SUPPLIER PRESSURES	*Security of supply*	X
		Supply- side efficiency	X
		Traceability	X
		Supply-side costs	X
	NORMATIVE INCENTIVES	*Personal*	✓
		Societal	X
		Industry	X
EXTERNAL DRIVERS	BUYER PRESSURES	*B2C demand*	X
		B2B demand	X
	MARKET PRESSURES	*Differentiation*	X
		Brand value	X
		Reputation	✓
		Increase market share and entering new markets	✓
	SOCIETY PRESSURES	*NGO activism*	X
		NGO engagement	✓
	REGULATORY PRESSURE	*Pre-emption of regulation*	✓
		Compliance costs	X
		Regulatory consistency	X
		Barriers to entry	X
		Reduction in tort liability	✓
	INVESTOR PRESSURES	*Communication*	X
		Shareholder resolutions	X

7 Conclusions

This chapter synthesizes the findings and provides a brief review of the research contributions of this project. Concretely, the research question is outlined and answered. Also, the importance of the thesis in its context is highlighted and recommendations for future research are given.

Application of SB2BPS is very popular even for standards that receive strong critiques and have a dubious effectiveness. Being sceptic of awareness as main driver for it, this project tried to find out the true reason behind the mentioned behaviour. Based on Stakeholder theory, a conceptual framework listing potential drivers was created. Then, it was applied to a real case study through personal interviews and the study of additional documents. The motives why Lantmännen applies RTRS standard in its soy SC despite its doubtful effects on sustainability were analysed and the found answers to this research question are comment thereafter.

First of all, sustainability awareness is not considered as a main driver of the standard application. There is no doubt that the cooperative is concern about soy production issues and matters about them. Furthermore, this consciousness has been identified in the whole business and not only in the soy SC. But, despite several facts reinforcing the assumption that Lantmännen is driven by a real concern, our findings do not corroborate that awareness is the major reason for RTRS implementation. The extended list of RTRS critiques and its debatable effectiveness make hesitate about it. Furthermore, the weight of the economic pillar of the TBL seems to be superior than the one of the environmental and social aspects. This fact reinforces the conclusion that sustainability awareness is not Lantmännen's main motivator for requiring RTRS to suppliers. Also, there is a slight difference between the certified and conventional crop in terms of sustainability. This points that the standard does not respond to Lantmännen's strong awareness about soy production and that the motives for engagement in the scheme are others.

So, other internal and external reasons for Lantmännen RTRS implementation have been detected:

- Board of directors' personal norms
- Reputational risk management
- Maintenance of market share
- NGO pressure through engagement
- Pre-emption of regulation
- Reduction in tort liability

Among them, reputational risk can be underlined as the most relevant one. It was clearly mentioned by the interviewee, corroborated by other data analysis and supported by previous research. Nonetheless, the listed drivers are correlated among them and overlapped, and it is difficult to isolate their influences.

While the presence of SB2BPS is expanding rapidly all around the world, little research has been done in the field until this moment. This kind of standards can play an important role towards sustainability, both in a negative and a positive way. Sustainability awareness and

good faith of organizations are generally taken for granted. But this research shows that they cannot be trusted indiscriminately and that several reasons can lead a firm to apply a SB2BPS. This research project in general, and the derived conclusions, are helpful for creating better insight in the field and could contribute to further sustainable production.

Due to the novelty of the topic, the areas yet to be explored are countless. For example, patterns of behaviour could be created applying similar research to different cases. Also, it would be interesting to study other SC players' perspectives as a supplier or a retailer point of view. In occasions, suppliers are the ones engaging in SB2BPS even buyer firms do not require them to do so. Likewise, retailers can demand their suppliers of final products to comply with a specific scheme. Furthermore, a comparison between drivers for public and private SSs can be relevant. Also, develop a similar study for SB2CPSs could be attractive as the huge difference between B2B and B2C relationships.

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Appendix 1: RTRS Chain of Custody Models charts

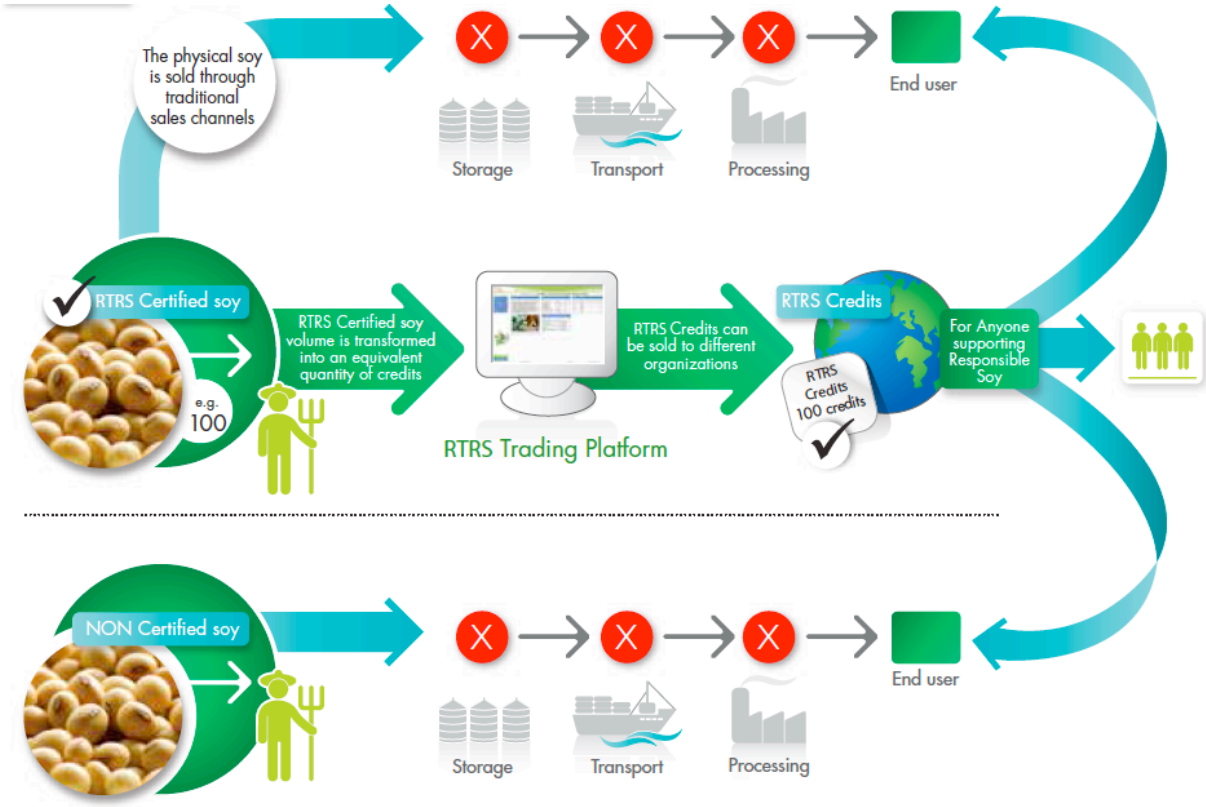

Figure 8. Buying RTRS certified soy through credits flow (Guide for RTRS material Trading, 2014)

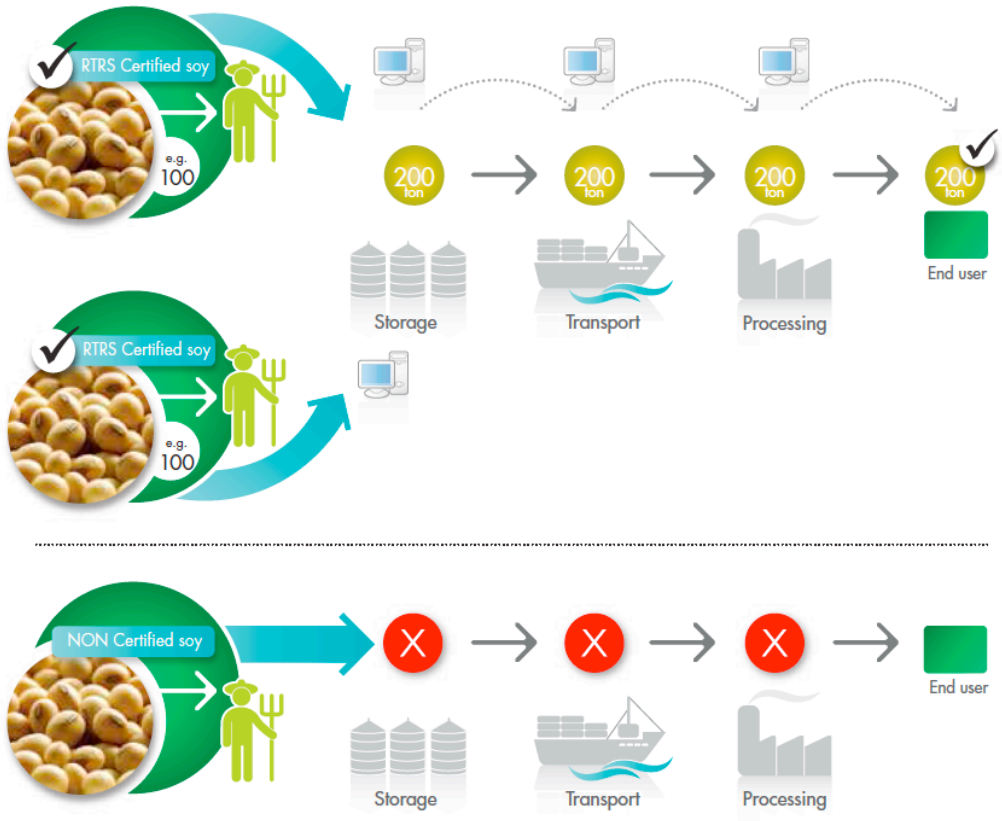

Figure 9. Buying RTRS certified soy through the Segregation model flow (Guide for RTRS material Trading, 2014)

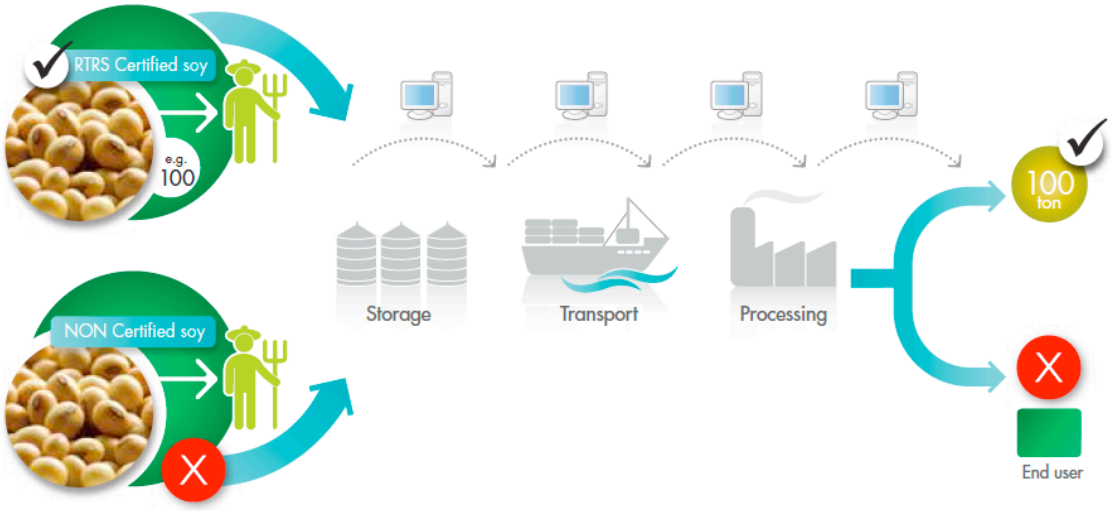

Figure 10. Buying RTRS certified soy through the Mass Balance model flow (Guide for RTRS material Trading, 2014)

Appendix 2: Letter of critical opposition to the RTRS, April 2009

We, the undersigned, call for the abandonment of the Round Table on Responsible Soy (RTRS), on the following grounds:

1. RTRS allows and encourages the expansion of soy monocultures
The expansion of soy monocultures is resulting in:
*Environmental degradation, including: loss of forests and savannahs due to direct destruction by soy monocultures or displacement of existing agriculture (particularly cattle ranching and small holder agriculture); related losses of biodiversity; release of greenhouse gases into the atmosphere through land-use changes, fertiliser use including NOx emissions; soil erosion and disruption of surface and ground water and rainfall patterns;
*Socioeconomic problems such as land conflicts leading to human rights violations, loss of livelihoods, and expulsion of rural communities, small farmers and indigenous peoples from their land. Such expulsions are effectively forcing displacement of the local population into urban poverty or previously undisturbed natural areas, violating communities' fundamental right to food, increasing concentration of land ownership by big companies, and feeding rises in related rural unemployment, low employment and slavery-like conditions on industrial farms, poverty, malnutrition, rising food prices and loss of food security and sovereignty due to displacement of staple food crops and increasing corporate control over food production; and
*Severe health problems and poisoning in the local population due to the over-use of agrochemicals.

2. RTRS promotes GM soy as "responsible"
The RTRS will enable the certification of genetically modified (GM) soy as "responsible", even though there is increasing evidence that after a few years of GM soy cultivation, both overall agrochemical use and resistance problems increase substantially.
Brazil recorded nearly an 80 % increase in the use of the herbicide Roundup (based on glyphosate) between 2000 and 2005, and a 15-fold increase was recorded in the United States between 1994 and 2005.[1] This has led to an increase in herbicideresistant weeds in Brazil,[2] Argentina,[3][4] and the United States,[5] pushing farmers onto a new pesticide treadmill of increasing applications of glyphosate-based herbicides in addition to other herbicides (such as the more dangerous Paraquat).[6][7] As a result, GM soy has increased production costs and environmental degradation rather than decreasing them as promised by GM companies. Neither does GM soy increase yields[8] or increase ability to crop in dry or salty land, as often cited by supporters.[9]
Use of Roundup Ready (RR) soy (genetically engineered to tolerate glyphosate-based herbicide) has also facilitated indiscriminate fumigations (often by aerial spraying) affecting human health, food crops and the environment. A report by the Rural Reflection Group (Grupo de Reflexión Rural, or GRR, from Argentina) documents how spraying glyphosate-based herbicides on RR soy leads to an increase in health problems in the countryside such as cases of cancer at early ages, birth defects, lupus, kidney problems, respiratory ailments and dermatitis, evidenced by the accounts of rural doctors, experts and the residents of dozens of farming towns.[10]
GM crops are rejected by millions of consumers, NGOs and governments all over the world for many reasons. This means the vast majority of the GM soy crop can only be

sold as animal feed and meat, dairy products and eggs produced using GM feed are sold unlabelled in the countries that reject GM as food for humans. There is mounting scientific controversy as to the adverse impacts of GM on health and the environment, as seen by recent studies produced in France,[11] Austria,[12] the US,[13][14] and Sweden.[15] These studies demonstrate that do not yet fully understand the impacts of GM cultivation and use on human and animal health, soil structure, and biodiversity. Their widespread use should therefore be halted to prevent irrevocable harm.

3. RTRS principles and criteria are too weak to protect the integrity and biodiversity of the Amazon, Cerrado, Chaco and other regions from immediate, severe, and irreversible degradation

The Amazon, Cerrado, Chaco and other regions are under immediate threat from a constellation of damaging agricultural practices and social impacts, as described above, for which soy cultivation is a core enabling factor. The RTRS principles and criteria cannot and will not effectively address these issues.

Unless these immediate crises are addressed promptly, which cannot be done through voluntary certification, these regions will be reduced from farmland to wasteland, and the smallholders and indigenous people of Brazil, Argentina, Paraguay and elsewhere will be displaced and become the new urban poor.

By providing a cover of "sustainability" for an inherently unsustainable system of production, the RTRS is an obstacle to progress. We call on governments, civil society and companies to tackle the real problems (e.g., over-consumption, inequitable distribution of resources like land and water) and to promote real solutions such as:

*phasing out GM and intensive non-GM soy in favour of agricultural practices which work with nature instead of against it, like organic agriculture and integrated crop management;
*executing land reforms in producing countries, which will address highly inequitable land ownership and concentration;
*substituting soy in animal feed with locally-grown protein crops in importing countries;
*stopping the promotion of large scale agrofuel production as a sustainable solution;
*developing better transport systems that reduce demand for energy and fuel; and
*increased government support for diversification of production and stimulation of local production for local markets that contribute to food security and food sovereignty in producer and consumer countries.

The RTRS process will not deliver improvements in these or a host of other areas and should be abandoned.

Signed (groups):

Anthra – Hyderabad, Andhar Pradesh, India
Arbeitsgemeinschaft bäuerliche Landwirtschaft – Lüneburg, Germany
A SEED Europe – Europe
Associação dos Consumidores de Produtos Orgânicos do Paraná – Curitiba, Paraná, Brazil
Biofuelwatch – UK
Campaña "No te Comas el Mundo" (Xarxa de l'Observatori del deute en la Globalització, Xarxa de Consum Solidari, Veterinaris Sense Fronteres), Spain
Carbon Trade Watch – Netherlands / UK / Spain
Centro de desenvolvimento Sustentável e Agroecologia Sapucaia – Amargosa, Brazil
Centro de Referência do Movimento da Cidadania Pelas Águas Florestas e Montanhas Iguassu Iterei (Iguassu Iterei Water, Forest, Mountain Citizenship Movement Reference

Centre) – São Paulo, Brazil
Centro "E. Balducci" Udine – Italy
Colectivo La Otra Movida – Buenos Aires, Argentina
Community Alliance for Global Justice, Seattle, WA, USA
Corporate Europe Observatory – Europe
Ecologistas en Acción, Spain
EcoNexus – UK
EdPAC (Educación para la Acción Crítica) – Barcelona, Spain
Enginyeria Sense Fronteres – Barcelona, Spain
FERN (Forests & the European Union Resource Network) – Brussels, Europe
FIAN Austria – Vienna, Austria
FIAN International – International
FIAN Netherlands – Netherlands
49th Parallel Biotechnology Consortium – Australia, Canada, Columbia, South Africa, UK, USA
Fórum Carajás – Brazil
Forum for Biotechnology & Food Security – New Delhi, India
Friends of the Earth Australia
Friends of the Earth England, Wales and Northern Ireland
Friends of the Earth France
Friends of the Earth International
Friends of the Earth Spain (Amigos de la Tierra España)
Gen-ethical Network, Berlin, Germany
Glasgow Group, Friends of the Earth Scotland
Global Forest Coalition
GM Freeze – UK
GMWatch – UK
GRAIN
GRR-Fundación Pasos – Argentina
Grupo de Reflexión Rural – Argentina
Grupo Semillas – Colombia
Iterei–Refúgio Particular de Animais Nativos (Iterei Private Fauna and Flora Reserve, affiliated to the Planet Society of Unesco's Culture of Peace) – São Paulo, Brazil
Kheti Virasat Mission – Punjab, India
Living Farms – Bhubaneswar, Orissa, India
MPA (Movimento dos Pequenos Agricultores) – Brazil
Mouvement Ecologique – Luxembourg
NOAH - Friends of the Earth Denmark
PRO ECO grupo ecologista – Asociación Civil – Tafí Viejo, Tucumán, Argentina
pro-Natural Food Scotland – Glasgow, Scotland
Pro Regenwald – Germany
Proyecto Gran Simio (GAP/PGS - España) Asociacion Internacional e Nacional – Madrid, Spain
Rettet den Regenwald, Germany / Salva la Selva, Alemania
Shramik Janata Vikas Sanstha Medha – Maharashtra, India
Scottish Green Party
Soil Association – UK
Soy Alliance – International
Terræ Organização da Sociedade Civil – São Paulo, Brazil
Thanal – Thiruvananthapuram, Kerala, India

Transgenics Fora! – Barcelona, Spain
Union paysanne – Québec, Canada
Via Campesina European Coordination
Washington Biotechnology Action Council, Seattle, USA
World Rainforest Movement – Uruguay
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Chief Science Advisor, Campaign for Safe Foods and
Member, Board of Advisors, Oregon Physicians for Social Responsibility
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Umendra Dutt
Kheti Virasat Mission, Punjab, India
Bhaskar Goswami
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Robin Harper MSP
Scottish Parliament
Kavitha Kuruganti
Kheti Virasat Mission, Punjab, India
Peter Melchett, policy director, Soil Association
Ralph L. M. Miller
Director, Associação dos Consumidores de Produtos Orgânicos do Paraná – Curitiba, Paraná, Brazil
Devinder Sharma
Forum for Biotechnology & Food Security, New Delhi, India

Appendix 3: Interview questions guide

10th April 2015

The beginning of RTRS in Lantmännen

1. *How did you get to know RTRS standard?*
2. *When the company started using it?*
3. *What do you consider as the main(s) driver(s) for the standard to started being used? (For example Swedish farmers or public in general pressure/demand)*
4. *How did you decided to start requiring this standard to suppliers? Was it a joint decision or a person's initiative?*
5. *Did all members in the cooperative agreed with the certificate before applying it?*

Why RTRS

1. *Have you considered other soy standards as Pro Terra for example? If yes, why did you choose RTRS at the end?*
2. *Have you used other soy standard before?*
3. *Have you ever thought about creating your own private standard for soy?*
4. *Do you think a public regulation for a more responsible soy will be better?*
5. *Do all members agree with the standard or different opinions about it exist within the cooperative?*
6. *Have you ever think about stopping importing RTRS-certified soy, after for example two of the major players in Brazil, Aprosoja and Abiove, left the multi-stakeholder group in 2010?*

Benefits and drawbacks of RTRS

1. *What are the main benefits from buying RTRS-certified soy for Lantmännen itself?*

   Some suggestions:
   - *Risk management*
   - *Differentiate product (added value)*
   - *Reputation*
   - *Food safety*
   - *Greater benefits*

2. *What are the main benefits from RTRS to other parties in the soy SC?*
3. *What are the main drawbacks from buying RTRS for Lantmännen itself?*
4. *What are the main drawbacks from RTRS to other parties in the soy SC?*
5. *Do you support other parties in the SC to overcome these drawbacks? For example, do you help soy farmers paying for the certificate?*

Effectiveness of RTRS

1. *Do you check yourself the effectiveness, in terms of sustainability, of this standard?*
2. *Do you have evidence that the certified-soy is more sustainable than the conventional one or do you just trust the certification scheme?*
3. *In an international SC is very difficult to keep detailed track of the process. However, in your webpage you state that Lantmännen "is active throughout the grain value chain from field to fork." Is the RTRS certification facilitating the procedure? Do you trust the system or do you do your own parallel checking?*
4. *Would you change something about the standard content for achieving more sustainable results?*
5. *Do you consider it is appropriate called as "responsible" the RTRS-certified soy?*
6. *Do you consider the standard improved since you belong to the group?*

Participants in RTRS

1. *Have you ever been present in one of the celebrated roundtables?*
2. *If yes, how would you rate the level of disagreement among different participants? Do you consider your voice is taken into account?*
3. *What do you think about the fact that none soy Brazilian farmer is a member of the roundtable?*

Critiques about RTRS

1. *As you may know, RTRS standard received many critiques. The most popular one is about the possibility that the GM soy is certified by RTRS. What is your position about GM RR? Do you consider it is adequate to include this kind of soy in the standard?*
2. *As a farmers' cooperative, I expect your knowledge about crop production is extent. What do you think about the fact that RTRS does not require crop rotation or ban pesticides at all (as the "Organic" certificate does)?*
3. *Are you awarded of the "Mass Balance" mechanism allowed by RTRS?*
4. *It is said that RTRS supports big producers and the standard is considered a handicap for small farmers in rural areas. Do you have evidence of these facts? Is he social aspect less important for Lantmännen than the environmental one?*
5. *The guidelines provided by the certificate scheme are more similar to advices. Did you need to reinforce them somehow to be easier to implement?*
6. *Do you think the standard is just used in some cases for green washing?*

Other standards in Lantmännen

1. *Do you require other standards to suppliers of different crop than soy?*
2. *Do you think standards facilitate coordination along the SC?*
3. *Do you think your reputation is better with the use of these standards?*
4. *Do you consider your practices are more sustainable since applying these standards?*
5. *Do you consider other ways of achieving sustainability? Do you apply them? What is for you the most effective method?*

22nd May 2015

1. *Which is your market share in the Swedish soya market? Do you enjoy a monopoly position?*
2. *Do you think that your organizational relationships improved due to the standard acquisition? (For example, with members of the Swedish Soya Dialogue or consumers)*
3. *What is the difference in the price you pay between RTRS and conventional soya?*
4. *What is the difference in the price the producers earn between RTRS and conventional soya?*
5. *In the previous interview you described RTRS certified soya as "responsible" but highlighted that can be never considered "sustainable". What is the difference for Lantmännen? Do you think it would be possible to call it "sustainable" in the future? Are you pursuing it?*